AMERICAN PHRENOLOGICAL JOURNAL.

AND

Repository of Science, Literature and General Intelligence.

VOL. XIII. NO. III.] NEW YORK, MARCH, 1851. [$1.00 A YEAR.

PUBLISHED BY
FOWLERS AND WELLS,
131 NASSAU-ST., NEW YORK.

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EDITORS.

DEBATE OF THE FACULTIES.

ON THE PURSUITS OF LIFE.

NUMBER I.

The members being assembled in the Rotunda, called Cranium, ORDER took the chair, by general consent, when CAUSALITY introduced the following resolution:—

"RESOLVED, That it is time to make a selection of a pursuit for life, and that this question be now discussed."

"In deciding upon the merits of this resolution," said CAUSALITY, "I think it the part of wisdom to select something which will be useful to mankind, and which can always be relied upon for a support. Anything will satisfy me which will not fail with the change of fashion. Agriculture is good, and can never fail to be needed, nor will it ever be overdone. Besides, the king and the clown alike need bread; so that the vibrations of fashion and fluctuation of opinions, religious or political, can never set it aside. The same is true of blacksmithing, carpentry, shipbuilding, masonry, and manufacturing cloth, leather, iron and lumber and many other substantial trades. Legitimate commerce, and general trade, are likewise necessary, but very liable to be overdone."

IDEALITY arose, and said, "I trust that great care will be taken in this selection; for really I can hardly perceive it possible for me to be contented with any of those common pursuits named by our venerable friend. I most earnestly implore that we may have something ornamental, like sculpture, painting, Daguerreotype, selling fancy goods, or if we must manufacture, let it be watches, jewelry, or that which is decorative and beautiful."

APPROBATIVENESS addressed the chair: "I agree, in the main, with the last member up; but some of the occupations he has named would not suit me. The idea of working in plaster and marble, and looking dusty, like a miller, is horrible. True, we might excel so as to obtain fame, like a Canova or a Powers, when we would be courted by the great, and our name sent down to posterity on the enduring statue and scroll of honor. But should we fail of achieving the highest honors of the art, I would by far prefer to be a genteel tradesman in an elegant store, with aristocratic customers, where we could dress finely, and live in style. That is the life and the business for me. I go for a business of the highest respectability, and one in which our efforts will not be regarded as *labor*.

CAUSALITY whispered a word to CALCULATION, who rose, and said, "Our friend who has just resumed his seat is perhaps not aware of the anxious cares, the searching estimates and calculations, the far reaching plans and harrassing duties which will devolve on us to keep such a mercantile business in successful operation. Financiering and calculating profit and loss, contriving to meet payments, posting books and making bills, running after bad debts, and managing a store full of clerks and selfish customers all day and half the night, is no trifle, but is so much like *labor* that it takes a world of vanity to twist it into any other name. One may bow and smile over a counter to fashionable customers, and be arrayed in nice attire, with hair perfumed, and lily-white hands, loaded with sparkling rings, and perhaps reap a few bargains; but this is the poetry of the business. There are ten thousand annoyances and cares that the inexperienced little dream of, until they become sober realities. Look at the grey locks, careworn features, and anxious, agitated manner of merchants—old before their time—and it takes off some of the tinsel of the commercial pursuit."

"I am informed," said CAUTIOUSNESS, "that ninety out of every hundred who engage in mercantile pursuits, fail in business and die poor; and I shall take time to consider before I engage in so hazardous an enterprise, with the assurance, too, that we must work—yes, *work*—as hard as any mechanic, and that kind of work too which wears out the health, nerves, patience, and sometimes the honesty of the man. I had rather have the dust of the miller, or the soot of the forge, or the clamor and labor of the lumber mill, with the certainty of a substantial competence, than to shine in gay colors a few years among fashionables, and run the risk of being kicked at last into the hovel of pinching poverty by the very cliques, for the gratification of whose pride and vanity we had lived and labored, and to which we had finally been sacrificed."

"But," responded APPROBATIVENESS. "I

am informed by HOPE, and believe it true, that we shall be of the fortunate class who get rich; and SELF ESTEEM says, we can, without doubt, succeed, as he is quite confident that few posses the talent which we can bring into the business. I don't care if we do have balance sheets to make and bank notes to pay, for every one knows it is respectable to be seen and known '*on 'change*;' and as to the night watchings and the drudgery of the business, so much feared by CAUTIOUSNESS and magnified by CALCULATION, who cares so much for that, if one can be called a splendid merchant, and ride in his carriage, and live fashionably? But it should be remembered that a *merchant* does very little *work:* that is done by clerks and porters. It should not be forgotten that we are to be a *merchant*, the owner and proprietor. Then we can wear fine cloth, elegant ornaments, polished boots, and live in ease and respectability."

"Nonsense," said COMBATIVENESS, "give us a business that is manly in its character. I am utterly disgusted with the soft twattle of APPROBATIVENESS about elegance, gentility, and effeminacy. For a white hand, standing dicky, flashy chains and rings, and fashionable dress, he would run the risk of protested notes, bankruptcy, a hungary stomach, and a hovel. I would a thousand fold prefer to grapple resolutely in stern effort, and force from the grasp of relentless fortune an honorable competence, than to smile and bow to win the good graces of the fickle dame. He may rub his white hands, and whisper soft persuasive blarney for success; but I prefer to seize the prize with my hard hand and stalwart arm, and shout my manly triumph with the lion's voice. I am ready, with FIRMNESS, DESTRUCTIVENESS, and CONSTRUCTIVENESS, to plunge into the rugged wilds of the West, and redeem it from solitude; or to build ships, or in them ride the stormy ocean; or in the mine, forge, or factory, force matter into useful forms; anything of an industrial character, that will enable us to drive our way to prosperity, will suit me better than selling shirt buttons, needles, pins and tape. It is not in my nature to wait for a business to come to me. I desire to rush out into active life, and by main strength of muscle or machinery, force prosperity to yield her treasures."

"Well said," responded FIRMNESS, "Give us a business, whatever it may be, that requires, and will repay, manly energy and peiseverance. I cannot endure fickleness and irregularity. 'Sure and steady wins the day.' Our friend COMBATIVENESS may rely upon my constancy in aid of his proposition.

SELF ESTEEM rose, with unbending dignity, and having surveyed each member very coolly, proceeded to say, "I have listened to the several suggestions of members, hoping that the choice of a pursuit might be made without any council from me, choosing that those who have the work to do would satisfy themselves as to the kind of business to be done, leaving to me merely the general direction or superintendence of the business when established. Let it be understood, however, that I would much prefer a dignified calling—a large, heavy business, I care not what is its character, whether tilling the soil, navigating the ocean, wielding the sledge, rearing the edifice, felling the forest, or substantial merchandise. Give me as aids, CONSCIENTIOUSNESS, FIRMNESS, CAUSALITY, COMBATIVENESS, DESTRUCTIVENESS, and CONSTRUCTIVENESS, as right hand men, and I will engage to make honorable any business which a man ought to engage in. Inglorious idleness, and consequent dependence, I cannot tolerate. To pursue a course requiring us to cringe to public caprice is equally odious. I cannot eat the bread of dependence, nor wear garments spotted with dishoner. I would be a street scavenger rather, and ennoble my avocation by a character above reproach, and an elevated intelligence. No labor which is useful is degrading; and if I could be heard, to make a boot or rule a kingdom should neither elevate one man nor depress another. We lack true personal dignity when we suppose that the honest dust and sweat of useful toil degrades the MAN, or that simpering gentility, in ornamental occupations, necessarily accompanies true HONOR.

PROGRESS OF CIVILIZATION.

It is an admitted fact, borne out by all history, that a strong people must ultimately absorb the weak. We speak of strength, not as reckoned by numbers, or physical hardihood, or intellectual might merely, but a combination of all these elements, and an addition of high moral force.

The Greeks and Romans had power of intellect to direct their immense physical prowess, and although the world trembled before them and yielded to their sway, yet the violence of the conquests awakened a hatred in the vanquished which prevented the language and religion of the conquerors from keeping pace with their empire. The reason of this was because the moral and social faculties were not engaged in the conquest. Brute force, guided by intellect, awakens dread and fear, but never enkindles those moral and social sympathies which constitute the basis of civilization.

Wherever a conquest has been made without repulsive violence, and the ideas and language of the conqueror have been widely and humanely engrafted upon a people, there their influence and sway have been lasting. Spain, by a subtle policy, extended her empire over half a hemisphere, and held it for centuries, but was careful to imbue the people with her ideas and language, and although her power has been in many places crushed, yet the foot-prints of her civilization, her modes of thought, her maxims, her language, and, of course, a corresponding sympathy and affection, mark her presence and her influence.

Civilization, we regard as the manifestation of all the faculties of man in well directed and harmonious action. No man or nation is truly civilized who does not possess and exemplify all the higher attributes of human nature. There are thousands in civilized society who have little of *true* civilization. Merely animal in their feelings and aspirations, their actions are low, sordid and groveling. Their chief pleasure is in sensuality, and although they exist as human beings, surrounded by a higher sphere of mind, yet all they require to make them savages is an exemption from the overpowering force of law. Indeed they often break through that restraint, and recklessly brave its penalties. The true way to civivilize and elevate these unfortunate members of society, is to melt down the turbulence of their dispositions by a persevering address to their higher susceptibilities, and illuminate their minds by education. This alone will quench the fire of passion, and establish a moral tribunal in their natures.

Those whom we call savages and barbarians are universally under the dominion of the animal propensities. Their moral, social, and *perfective* faculties—including CONSTRUCTIVENESS, ACQUISITIVENESS, and IDEALITY—are feebly developed in head, and uninfluential in character. The bare skull of a savage can instantly be selected, without mistake,

from a hundred of those of civilized men, by the shape alone. Even the domesticated dog, horse, ox, cat and hog, show unmistakable differences in cranial development from those which are wild, corresponding precisely with the differences existing between savage and civilized man.

Man may *exist* merely as an animal, but he never fulfils his destiny until every faculty is brought to its highest state of development and perfection. The first progress made by man towards civilization was, of course, slow, because he had no higher types of the race to develop his powers; but favored by climate and circumstances, he gradually emerged from a merely animal state of being to a higher mode of life. Nor did civilization find its present elevation until, by a mixture of nations by conquests and marriages, a mental organization was produced which combine the force and bodily hardihood of the savage, with the cool reflection of the Saxon, and the artistic taste of more sunny climes.

The Anglo-Saxon possesses the best mental and physical organization that can be found, and his conquests have carried throughout the earth the noblest and most permanent civilization the world has ever seen. Nor does he ever loose a point once gained. Wherever he sets his foot he carries religious freedom, enterprise, useful art, a sound philosophy, a higher type of social order, and firmer security for life, liberty, and property. The conquered usually find their condition improved; new hopes are awakened, new fields of enterprise opened, and he hails his Anglo-Saxon conqueror as an ultimate benefactor. He, therefore, adopts his laws, learns his arts, imbibes his thoughts, and borrows his language in which to express them, and feels the yearnings of higher hopes and a nobler destiny.

The nation which carries into savage countries high toned moral and intellectual power, will impart by culture and amalgamation, the only elements of civilization, namely, the ascendancy of the moral and intellectual faculties.

The state of civilization among the various races of men can never be made equal, and it seems to be the order of nature that the weak gradually yet surely dwindle away, and become lost before the march of a higher order of men.

The North American Indian cannot mix and associate with the white man. Like the deer and buffalo, his favorite game, he retires towards the setting sun, and strews his track with his bones. His name and his deeds pale before the sun of civilization. The exceptions to this rule are among the most elevated of the tribes.

The Hottentots and other inferior races seem incapable of a high degree of elevation. Nor with their inferior organic structure can it be expected. We cannot "gather grapes from thorns nor figs from thistles." We must first "make the tree good that the fruit may be good also." The crab apple is not reclaimed in a single generation, nor can any better results be expected of the lower types of the human race.

By educating a generation to their highest capacity of moral and intellectual culture, they are enabled to transmit, by hereditary influence, a higher mental type to their posterity than they received, thus sending down the influences of education in organic development. Such children are more susceptible to improvement than the parents, and these tendencies from generation to generation, are thus constantly augmented till the mental character is remodeled, and made capable of appreciating and receiving all that is noble in industrial prosperity, art, science, peace, and enlightened Christianity.

ABUSE OF ORDER.

"O dear, Mr. Sharp, why don't you clean your feet before you come in, really you men are so slovenly you wear one's patience quite out. The kitchen, even, is too clean a place for you. And here comes that pesky dog, with his hair full of dust, littering the house —so it goes, litter and sweep, scatter and pick up, arrange and disarrange, the day through.

"Now, Jane, what is that curtain disarranged for? and here are the books mislaid again; I declare it takes the whole of my time to put things to rights. Who ever saw such a disorderly family. And there, John, you have left a chair out of its place; and here are Charley's play things on the floor, and that morning paper on the window stool, it is a perfect bedlam here; heigh ho, a slave to slovens am I, it is too bad.

"Don't open that window to let in the dust; our carpets and furniture will be ruined. I can't help it, if the air *is* too close; we might as well suffer a little inconvenience that way as to be buried in dust. This living in contact with dust and dirt I despise. I wish our house was in the middle of a ten acre grass plot, that we might not be so annoyed by dust, dirt, and litter.

"Ah, Bridget, everything is again in a muss in the kitchen. Can't you keep things more tidy and prim? I could do it, I am sure. The careless habits of servants annoy me *so* much, and the last is always more disorderly than any of the rest; and just as I get them trained to be neat, they get angry and are off, and I suppose it will be the same with you, just as you begin to learn my ways and to be good for anything."

"Indade, Mrs. Sharpe, you are the sharpest little bit of a woman I ever lived wid, quite entirely; and if it is nateness you want, you will have to look a long lenth before you find me bethers for that same: besides, I have lived in the nicest and dacentest ladies' houses in the city, sure, and I have, and niver a word of fault came to my two ears, fornenst I lived in this house. And no offense to ye, mum, but sure I hope the day will be short that I stay, if I must be scolded and called hard names and the likes, I do, indade, mum."

Thus, excessive Order in Mrs. Sharp kept her in a constant tease. She thus drove every servant out of her house as soon as they had become useful; her children feared to move lest they should disturb the fastidious arrangement of something, or scatter their things, or litter the house; and they avoided her company, because they were unhappy in her presence, and sought such society in the streets as chanced to offer, and they became contaminated by viscous associates while they received no marked influence from the mother, but angry essays on *disorder*, and she lived to regret their wayward course and depraved habits. To correct one *defect*, as she regarded it through her warped Order, she allowed all their other faculties to go astray. This she did not design or desire, but such was the result.

The husband, too, kind and noble hearted, and not less neat than men in general, who could have been moulded by kindness and forbearance into any desirable habits, left his home and family to avoid the perpetual din of fault-finding, and the extra fixedness and precision of everything at home, and sought company at a genteel hotel. He was a good fellow, full of soul and kind feeling, and having been burned out at home, he the more readily sympathized with the genteel loungers at the hotel. He imbibed habits of idleness and intemperance—neglected his business and his family, and in three years the

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sheriff sold him out of house and home. He is now a poor wreck of a noble man; his children are scattered, and his unhappy wife spends her days in sorrow over the wreck of her hopes and happiness, and at night, dreams of cobwebs, dust, and disorder.

A few days since a lady called at our office for a chart, who was described as being extra fastidious and precise to such an extent, that she was supposed by those but partially acquainted with her, to be cold, distant, and unapproachable, and that young gentlemen who admired her talents and attainments would fear to make advances, the whole arising from excessive ORDER combined with IDEALITY. She smiled, and said she knew she was ardent in her attachments, and would give anything if she could be familiar and easy, but, said she, it is out of my power, I seek to do so, but I fail; but never before knew the reason. Her friends confirmed our statement relative to gentlemen lacking courage to address her, and said that several would have preferred her above all others, but fearing a repulse if they made advances, and had become happily settled with others, while this lady, highly respected for her taste, talents, and moral worth, is single at twenty-eight.

We are quite willing that ORDER should be a *law*, and even "Heavens's *first* law," but doubt the propriety of allowing it to be a TYRANT.

MENTAL ECCENTRICITY.

NUMBER III.

A perversion of *Philoprogenitiveness*, or an insane manifestation of it, often produces the most ridiculous and troublesome results. Women have been known to steal, or kidnap children, if they were not blest with those of their own; or fondle dogs, birds, or cats, to a most "wasteful and ridiculous excess." Diseased, or excessive Cautiousness and Philoprogenitiveness, make many a mother miserable, respecting her children, if they are ill or absent, and perfect slaves to them at all times, besides spoiling them by squeamish fears, or over indulgence. Phrenological science would teach such mothers a valuable lesson, as well as the world charity, for the half insane oddities of such cases as the following diseased condition of the maternal impulse:—

"The inhabitants of the house No. 11 Rue St. Lazare, Paris, have as co-lodger an elderly widow, one Madame Deschamps, who has a great passion for cats. The inhabitants of the house were so much incommoded by the disagreeable and unhealthy odors which arose from that domestic menagerie, that they requested the Commissary of Police to abate the nuisance. This officer in vain begged Mad. Deschamps to do justice to her neighbors, in ceasing to offend their olfactory organs by day, and their auricular organs by night, but his requests were in vain. At last, wearied by her obstinacy, accompanied by a posse of officers of police, he went to her apartment to seize the offender. He opened the door and retired; the stench came near suffocating him. But the police are persevering—he returned and entered with his posse. They found Mad. Deschamps in bed—she had in bed with her three cats, which she said were sick, and vowed she had no others; but presently a fatal long-drawn M-e-w was heard under the bed; the curtains were raised, and behold, no less than thirty cats, with straight tails, and sharp teeth, in battle array!

The Commissary ordered the insurgents should be taken into custody—but this was easier said than done. However, after a pitched battle, the cats were conquered, and the whole thirty-three unceremoniously tumbled into a sack, and carried to the pound, amid their caterwauling, and the heart rending shrieks of the bereaved widow."

Another instance of similar character is related of a man in the same city, and is entitled by the narrator "Man's Weakness for Dogs:"—

"In the Rue Jean Pair Mallet, there was a widower, who was a dog-fancier. He was a retired baker, and possessed some fortune. Among his property he possessed a house, which he would not rent, but made it the general receptacle of all the dogs he could find, no matter how ugly they were; and as he was as little scrupulous about the means of obtaining them, as he was of their beauty, he soon procured a large number. The only tenant of the house, besides himself and his dogs, was a *chiffonnier*, who paid him no rent, but brought him all the offal he could find in his daily tours. The retired baker lived in the greatest misery, although possessed of fortune. He had no furniture in his house but one bed, hanging his clothes on a nail. When he went to bed, he called all his dogs to lie around and on top of him, and thus kept him warm.

"When the police cleared out his pets, he was so furious that he tried to commit suicide by leaping from the window. Who shall dare say that man's heart cannot love?"

Now what the writer here calls a "*weakness*," for these animals, is, in reality, an undue *strength* of parental love, which absorbed the judgment, and warped the mind. How much he meant by asking his last question, "Who shall dare say that man's heart cannot love?" is not definite. No one chooses to contradict man's power to love; but this question implies that every species of attachment springs from one source. This is not true. Benevolence produces universal kindness or sympathy; Adhesiveness, fraternal attachment, or love between equals; Amativeness, sexual love, Union for Life, connubial love; Philoprogenitiveness, a love of progeny, or pets, which is the kind exhibited, in a perverted state, by this man for his dogs. Between husband and wife, all these sources of love may be exercised, except the last, and this, by loving a common object, heightens all the rest. To this complex love power, the writer evidently alludes, yet bases his assumption on false premises—on a single faculty, the fountain of only one element of love, which may be strong in a person, while every other love element may be weak.

BARON VON HUMBOLDT.

HIS PHRENOLOGICAL CHARACTER AND BIOGRAPHY.

No person can look at the portrait of Humboldt without being immediately impressed with the fact, that he was one of the most extraordinary of men. His broad, high, and expansive forehead, the large size of his head in general, and the enormous magnitude of the upper portion of it, indicate extensive observation, a mind hungry for knowledge, and capable of mastering the most abstruse subjects; seeking out new truths, classifying and arranging the old, then of generalizing the whole into gigantic systems of thought and philosophy. The base of the head does not appear broad; hence selfishness and severity, with artifice and cunning, do not appear to be influential elements of his mind; hence the calmness, honesty, and placidity of his expression of countenance. The chest appears to have been large, and capable of furnishing an unusual amount of vitality to sustain life and health, and to invigorate the brain to a high degree of mental action and power. Such a head indicates a philanthropist, a moralist, and philosopher, and a master spirit among men, not in the direction of conquest

and blood, but in the pursuits of peaceful arts, the enjoyment of science, and an acquaintance with the whole arcana of nature.

MIRTHFULNESS, IDEALITY, SUBLIMITY, and CAUTIOUSNESS, organs ranged on the upper side-head, appear to be large, giving width and prominence to that portion; hence, with all his daring and enterprise, he would be prudent and safe, and pass through numerous difficulties without harm; and IDEALITY and SUBLIMITY large, would give a love for the vast, the sublime and beautiful in nature; and with large MARVELOUSNESS, a love for the novel, strange and surprising in the phenomena, which science reveals in geology, astronomy and philosophy. ORDER and CALCULATION also appear large; hence, method, precision, and statistical information would be eminently marked in his labors. Such a mind is inclined to theorise and speculate beyond the developments of history and forward to the future. Originality of mind, grasp of thought, and general comprehensiveness of intellect and imagination, should mark such an organization. Such a head is honest, and cautious in its conclusions, though inclined to magnify its pictures, and throw a splendor and distinctness around its productions. VENERATION appears large; hence a high degree of reverence for things sacred, and great love of antiquity. His mind is peculiarly adapted to revel among the ruins of the past, and speculate upon the earth's recorded history, and to stretch onward to the future development of the history of earth and its inhabitants. COMPARISON and HUMAN NATURE, as well as CAUSALITY, are magnificently developed; hence, his power of analysis, comparison and generalization, of abstract thought and criticism, and the power to understand character, motive, and habits of men and animals, is rarely surpassed. The social developments are doubtless large, while the moral, perfective, observing, and reflecting organs are of the first order. INDIVIDUALITY, LOCALITY, FORM, SIZE, COLOR, and LANGUAGE are quite conspicuous; hence his love of traveling and fondness for observation, power to measure magnitude and shape, criticism of colors, and descriptive talent, are unusually prominent. Such a temperament, being a combination of the vital, motive, and mental, and such an assemblage of large organs, united in a single individual, produce a sleepless activity of mind, and zeal, vigor, and enterprise necessary to give them full effect.

BARON ALEXANDER VON HUMBOLDT.

They have raised for him a monument, as a man of science and profound research, which will transmit his name to future generations as one of the chief ornaments and benefactors of the race.

BIOGRAPHICAL SKETCH OF BARON ALEXANDER VON HUMBOLDT.

"What a man!" exclaimed Goethe once, after recieving a visit from Humboldt. "I know of no man to compare him to: he resembles a source of ever-gushing sweet waters: he knows everything, and knows thoroughly what he does know."

The poet was right. Alexander Von Humboldt, who completed his 81st year on the 14th of September last, with all the undiminished vigor of his mind, and with a body still hale, is one of the greatest and most comprehensive minds that have flourished in any age, and one of the most important men of our own. He has been most appositely called the Napoleon of natural science, in order to convey the idea that he stands forth without comparison among ordinary mortals.

There have been, perhaps, few men so entirely fortunate as he has been; for nature endowed him with a sane body, and a gigantic as well as a sane mind. It is seldom that a European from a northern clime can rove with impunity among palm-trees; but on Humboldt, neither the heat of the tropics nor the icy cold of the Ural and Altai could exert any baneful influence. From an early period he was independent as to fortune, and there was no adverse circumstance to prevent him from giving himself to the impulse of his genius. Even as a youth, he enjoyed the society of the wisest and best in Germany. To a calm perspicuity of understanding he unites a wonderful acuteness of penetration, and his first impression is unerring. In powers of combination he has seldom been equaled; and besides his collossal memory, that never deserts him, that is equally faithful as it is rapid, his whole intellect is infused with a rich poetic vein, and again so vivid a fancy is all his own, his taste is so exquisite and fine, that he throws the charm of attraction over the very dryest subject he may happen to treat. Geographers unanimously recognize him as their master, historians gratefully confess that their lore is deeply indebted to him, and philologists have received no little light from him to illume what had been hitherto obscure for them in antiquity. Hardly is there one single field of scientific inquiry that Humboldt has not enriched; he has

even enlightened the fathers of the Church on their æthetic side. The Spaniards as well as Germans, so likewise the French and the English, enrol this wonderful man among their classic stylists; for in addition to the most accurate Latin, Humboldt writes Spanish, English, and French, with skill, precision, and force, as his own native language. When he gave lectures thirty years ago in Paris, the French willingly admitted that few of their own great countrymen came up to him in luxuriance, correctness, and clearness.

This man, in the plenitude of his understanding, and with the clearest consciousness, has lived with and through a period of transition such as the world has never seen since the earliest centuries of Christendom. Born in the same year with Napoleon, he knew the Great Frederick: his youth was coeval with the North American contest for liberty; he admired the great Washington: the drama of the French revolution, that convulsed the world, and that shed torrents of blood, he saw, and not remotely, pass before him, with its martial feats and its giants. But while the German empire of a thousand years was tumbling into ruin, and the German land was becoming the prey of the potent conqueror, Humboldt was wandering through the table-lands of the Andes or the low plains near the Orinoco and Rionegro; he was not an immediate witness of the disasters his countrymen bewailed at Ulm or Jena. During the long time of the restoration, he employed his leisure in the composition of those literary works that will remain as patterns in all ages for the natural sciences, for future research in the antiquities of America, and for every branch of geography. He, the man of fourscore years, who has so stirred men by the living word, and so genially promoted study, has seen, too, in the evening of his infinitely rich life, how the German people still struggle for a new conformation—for unity and freedom. So enlightened a soul, so clear a thinker, a head so incapable of all narrow-mindedness, must be devoid of prejudice, must be favorably inclined, from the depths of that soul, to the cause of freedom and progress. Yet for any immediate political activity his nature has been as little disposed as Goethe's was. Humboldt has ever been content with employing his influence preferably in behalf of science, which owes an infinite debt of acknowledgment to him.

There are very few scientific great individuals of the last sixty years with whom he had not personal relations. If anything in him, in addition to the immense comprehensiveness of his acquirements, could raise our astonishment, it would be his almost unparalleled industry, and that wonderful activity that distinguishes this great man. He has enlarged the science of navigation, especially enriching the history of nautics—geology, zoology, botany, are no less indebted to him than the collective physical sciences, more particularly meteorology, magnetism, that science which treats of the distribution of heat over the earth; geography, agriculture, and trade. Almost in every field in the history of nations, in political history, and lastly, in statistics, this German gigantic mind has formed new paths of exploration.

When a young man of twenty, after he had completed his university studies in Gottingen and at Frankfort on the Oder, we find him, in the company of George Forster, descending the Rhine, on his way to Holland and England; he writes his work on the basalts near the Rhine. Immediately after this he proceeds to Freiberg, for studying under Werner, the founder of geological science, and he writes on fossil plants. He then enters for a short time into the Prussian civil service; but the routine of administrative duties not satisfying his ardent mind, he applies with redoubled ardor to the study of animal electricity, goes to Vienna, where he labors intently on botany, then travels, accompanied by Leopold von Buch, and to whom it is still permitted to behold the light of day, through Salzburg and Styria, but he is compelled to renounce the plan of exploring Italy. He however repairs with his brother Wilhem to Paris, where he forms the acquaintance of his future traveling companion, Bonpland; and in 1799 sets out for the court of Madrid, to obtain there the permission of traveling through the Spanish colonies of America. In his eighteenth year he had resolved on visiting the American continent, and what he had studied and labored on up to his thirtieth year he considered as a mere preparation for the accomplishment of a greater task. The youth had indeed had his fancy fired at first by the splendid and luxuriant vegetation of the plant world, by the forests of gigantic trees interwoven with lianas and the foliage of countless shrubs, by the peculiarity of the lofty steppes on the Andes, the boundless extent of the savannahs, of which he subsequently traced so vivid a picture in his Views of Nature. Gradually, however, with his increasing knowledge rose the purely scientific interest, and Humboldt commenced his voyage across the Atlantic Ocean.

The hardy traveler, so carefully pre-instructed, traversed the mounts and plains of modern Venezuela, ascended the Orinoco, to where it branches off, and thus forms a junction with the Amazon, exploring Guayana, concerning which another German traveler, Schomberg, has lately given such valuable contributions; he then sailed across the sea to Cuba, the pearl of the Antilles, then back to the continent again, which he mounted along the valley of Magdalena, up to the table-land of the Cordilleras. Thus he scanned the majestic solitude of Quito, and navigated the coasts of the Pacific. He has conjured up for us the departed world of the State of the Incas in his life-breathing pictures and true delineations; thus he wandered through Mexico, and classically described it, returning thence by the United States to Europe. But while he was partly editing, partly preparing his works on the New World, he received, in 1829, the summons to travel, accompanied by Rose and Ehrenberg, to Northern Asia, and he, consequently, at the age of sixty years, visited Siberia and the Altai.

Humboldt's gigantic work on America, comprehends, in the large addition, seventeen volumes in folio, and eleven volumes in quarto. It treats of the geography of plants, of zoology, and comparative anatomy, astronomy, and geognosy; it presents a physical picture of the tropic regions, and especially treats also of their climatology. It contains views of the Cordilleras, and depicts the old Peruvian monuments, gives a political description of Mexico and Cuba as they then were, and concludes with a general representation of those travels that formed an epoch in science, and—if we may use the expression—which form the point of departure for a new "school or viatoril description," which likewise has obtained its worthiest disciples in Germany; for instance, Spix and Martius, Pœppig, Schomberg, Meyen, Erman, Ehreoberg, Rose, Eichwald, and many more.

Humboldt has described the Asiatic journey in the fragments on the climatology of Asia, but then wrote a master-piece of historical development of geographical knowledge respecting the New World, and into the progress of nautical astronomy of the fifteenth and sixteenth centuries,—a book with which

we, as far as our literary knowledge extends, can compare no other for comprehensive erudition. In the German edition of it we meet the remark, that one copy of the whole collection of Humboldt's works on America, in the large edition, now costs more than 10,000 francs, twice as much as the celebrated description of Egypt, for the publication of which the French Government advanced 3,000,000 francs; whereas Humboldt's voyages, although the 1,300 copper plates, the printing, and paper, cost 840,000 francs, were brought to completion by the patronage of the public alone.

At an age of seventy-four years, when other old men repose, Humboldt began his last work, the Cosmos, the sketch of a physical description of the world, and which is now completed, in the late evening of a busy life—a work whose outlines have been portrayed in the soul of the author for almost half a century. He wished to delineate how everything that is created on the earth and in celestial space had been taken up by him into his conception of a physical cosmical description.

With this work, that is also unique in literature, that has been translated into the language of all civilized nations, the powerful mind wishes to close its honorable scientific career. He has been, we repeat, a fortunate man during the whole period of his life. So propitious has destiny been to him, that it vouchsafed to him a brother, who, in other departments of genius, was nearly quite as great, and, in many respects, even still more conspicuous than himself. Both brothers, Alexander and Wilhem, bound by the strictest friendship to each, have tended to the perfection of one another. Alexander has survived the other; but the names of both these heroes in science are inseparable from each other for all future time. They form radiant stars in the bright crown of German science, and they have diffused the renown and glory of the German name over all the world.

ANIMAL PHRENOLOGY.

NUMBER III.

Phrenology throws a flood of light upon the animal kingdom. In every avenue of nature's work, we find analogies and adaptations indicative of wisdom in the establishment of the laws which govern all things in the wide domain of her administration.

THE TIGER.

See the harmony of organization exhibited in the Feline, or Cat species of animals, ranging from the lion to the domestic cat; embracing the tiger, leopard, jaugar, ounce, lynx, panther, and others. In all these animals we find similar organs, and similar habits and dispositions. All seek a living prey, and feed on flesh, and are dependent upon their own efforts for a supply of food. Their dispositions are cunning and watchful, ferocious and blood-thirsty. Their long, sharp claws, for seizing prey, their formidable canine teeth, for tearing it, and their cutting teeth, which act like shears, to cut flesh, united with tremendous muscular power to wield these terrible weapons with effect, are all perfectly adapted to carry out their dispositions. It is an interesting fact, that ruminating, or cud-chewing animals, and all that feed on herbage, have square headed teeth to grind their food, and muscles to produce a side motion of the under jaw; while the carnivorous, or strictly flesh eating animals, have thin wedge-shaped teeth, which come in contact like shears, and powerful muscles to shut the jaws, they are entirely *destitute of muscles to produce a side motion of the jaws.*

Their claws, by a beautiful muscular arrangement, are sheathed, so as not to touch the ground in walking, and thereby become blunted, and unfit for use; yet, by means of another muscle, these claws are instantly thrown out, at the pleasure of the animal, and make even the little house-cat fearfully formidable. The stomach, and digestive apparatus, are also adapted to an exclusive flesh diet, and the appetite of the animal accords with all these arrangements. All such an organization needs, to make it a terror to the whole animal kingdom, is a disposition to wield its terrific implements. With this disposition they are provided, in the great development of DESTRUCTIVENESS and SECRETIVENESS, which give such width to their heads from ear to ear. How broad the head of the tiger, and yet how low and flat on the top—a perfect Phrenological embodiment of unmitigated fierceness, and a lack of kindness and sympathy.

THE LEOPARD.

The same general form of head is seen in the leopard. This peculiarity of head is also seen in birds of prey, and the same dispositions attend it. As carnivorous beasts and birds have characters and heads bearing a strong resemblance to each other, we ought to expect a similar likeness to each other, of all the herbivorous tribes of animals, and granivorous birds. And such is the fact. Omnivorous, or *all-eating* animals and birds, have heads, dispositions, and appetites occupying a medium between the two extremes. The bear, the hog, and crow, may be named, who eat meat and vegetables with equal relish. The feline tribe eat meat only, and have the destructive propensities strong. The cow and deer eat only vegetables, and have not the disposition to destroy life.

THE STAG.

The deer, goat, sheep, and rabbit, are similar in mental character, and physical structure. They are light, graceful, and nimble in action; timid, to the last degree, amiable and inoffensive. While the carnivorous races are ferocious, cruel, and combative, and have wide heads to correspond, the deer, and animals of similar character, are very narrow at the base of the brain, through the head at the ears, and back of them. In the head of the stag above, which is the protector and most courageous of the flock, we see a vast difference in the width of the head, compared with the most amiable of the carnivorous races.

THE DEER.

The pretty little deer, whose head is here represented, shows a still more delicate organization than the other, and a more narrow head. Though a male, its horns are very small and slight. It stands at the lowest point in the deer species, and is the most amiable and peaceable of all that placable and inoffensive family. It never offends against the peace of inferior animals, or fights, except with the males of its own species, at a particular season. This we regard as the embodiment of innocence, timidity, and amiability. How different from the tiger and the leopard, in head and in disposition! Surely there is design in all this. Circumstances never made the difference. The sharp teeth, sheathed claws, appetite for flesh, and savage disposition of the ferocious tribes; or the narrow head of the deer, with the timid, kind spirit, blunt teeth, appetite for herbs as food, and four stomachs, to receive, soften, and digest it. The dissimilar organization of the two, and the corresponding ferocity and docility of their respective dispositions, are alike the fundamental intention of the Creator. Such a train of uniform causes and effects, acting in triumph over all circumstances, proves that, with them at least, "whatever is is right."

Physiological Department.

PHYSICAL EDUCATION.

The great theory of health is to LIVE RIGHT. Pure air, proper food, cleanliness, and appropriate EXERCISE, are the great essentials to health and long life. With these we may literally "throw physic to the dogs;" without them we may blister, and bleed, and dose with all the nostrums of the regular and irregular schools of medicine, exhaust the empire of quackery, and be groaning invalids and crawling wrecks of humanity, until death closes the scene.

Man was made to enjoy life while he lives, and to live to old age. The fact of a clock or watch stopping, involves a charge of a want of skill in the maker, or ignorance and carelessness on the part of the user. Even so, either we are defectively organized in the outset, or badly managed afterwards, or our life would not stop until worn out or "run down" by old age.

Throughout animated nature, exercise seems to be a law of its being, nor can full development and health be attained without it. Behold the caged bird! how it skips from perch to perch for hours, solely for exercise. See, also, the young eagle or pigeon in its native nest. It rises on the edge many times every day, and uses its wings with vigor and earnestness as if in the act of flying. Without this previous education of the muscles it would never attain either strength or command of the muscles used in flying, and its first attempts to cut the air would plunge it from its native crag to a death in the surf, or on the rocks below. The bird, in this exercise, obeys an instinct of its nature without knowing why, and so a child, in like manner, for precisely the same reason, begins to move and labor from a few weeks old until he attains full maturity.

With these obvious laws before us, how suicidal for parents to cramp their children by tight dressing, or by dictation prevent the free use of all the muscles. Organized beings must exercise or die. It is a law of physical organism, that exercise as well as food is necessary to development and strength of muscle. Every motion, every effort of strength invites blood to the part from which fibrine, the matter of which muscle is made, is deposited. Swing up an arm and it becomes soft, and wastes away, and its strength and health depart.

There has been a change of late years in the management of infants in this country. Instead of bandaging the little one so tightly as formerly, very many dress them so loosely as to permit the free use of their motive powers. It is well to place them on a bed, or carpet, and let them roll and kick to their hearts' content. They evince their love of this exercise by good humor and a full improvement of every possible muscular action. Special care should be taken not to compress the chest by dressing or by handling with too firm a grasp under the arms. This serves to cramp the vital organs and promote disease. Nor should the child be early encouraged to walk: as soon as it has acquired strength and balancing power it will walk of its own accord. Most persons discourage creeping—this is wrong. Nothing is better for the child than to "go on all fours." It serves to keep the spine straight—throws the shoulders back—divides equally the weight of the body between the arms and legs, and prevents the latter from becoming crooked—*promotes the development of the chest*, and gives the child more real and general exercise than walking; and lastly, it is nature's way to nurse and develop the infant man.

True, it makes a mop of the child's clothes and wears them out, which is not pleasing to IDEALITY and ORDER; but CAUTIOUSNESS and CAUSALITY say it is better to make and wash clothes for a healthy child, than to make little shrouds and winding sheets; or to wear out weary years in fostering the impaired constitutions of juvenile invalids.

Maternal affection is grossly misdirected when childhood is deprived of natural exercise, and forced into unnatural positions and efforts, merely to make it look pretty, and to have it walk early. Not only are children deprived of proper exercise and badly dressed for health, but they are pushed forward in mental labor and excitement, and the brain thus made to exhaust nearly all the vitality which the little sufferer can manufacture; hence it becomes nervous, irritable, and, perhaps, a confirmed dispeptic before it reaches the sixth year.

Children should vegetate, and build up a good constitution before the mental powers are much taxed, especially with books.

To give an idea of the philosophy of muscular action, we find it necessary to present a skeleton which is the framework to which the muscles are attached. The bones are the basis of support to the softer parts of the body, yet without muscles these bones could not be moved. No piece of machinery which man has ever constructed is susceptible of such a variety and perfection of movements as that of the animal frame. The human hand surpasses in the multiplicity and niceness of its movements all the combinations of machinery ever invented.

The bones composing the human frame, are more than two hundred in number, and are nicely joined together by ligaments, and a soft, yet tough, smooth substance, called *cartilage*, covering the ends and parts united so that action shall be easy and without irritation. This great number of joints affords facility of motion, and serves also to resist the effect of sudden shocks.

The skull consists of eight bones which serve to protect the brain. In infancy they are not firmly united, but at maturity they are nicely dovetailed together by notches which interlock. A blow on the head is less injurious than if the skull were solid like an egg-shell, and fractures are generally arrested at the sutures, or seams.

The spine consists of twenty-four bones which are admirably fitted to each other, the whole constituting a hollow column through which the spinal cord descends from the brain. The bones of the spine are called vertebra, from a Latin word, meaning to turn. Each vertebra has seven distinct projections for the attachment of muscles.

HUMAN SKELETON.

From the location of these bones they are divided into three classes:—The Cervical, C, or those of the neck, seven in number. The Dorsal, D, or those of the back, and the Lumbar, E, or those of the loins. The Clavicle, or collar-bone, A, uniting the tip of the shoulder and the Sternum, B, constituting a kind of anterior brace to the shoulder which has its opposite on the back in the Scapula, or shoulder blade, F. There are twenty-four ribs which constitute an enclosure for the heart and lungs. These are joined to the spine, and to the *Sternum*, or breast-bone, B, except those called false ribs, five on a side, which are joined to the Sternum by means of cartilage. These are the ribs which are so easily compressed by tight lacing, from which so much dispepsia and consumption have been produced. G. is the Humeris, or arm bone; H, I, the bones of the fore-arm, H, the radius, or bone which enables one to roll or twist the fore-arm and hand, and I, the Ulna, which gives the sweep of the arm from the elbow joint.

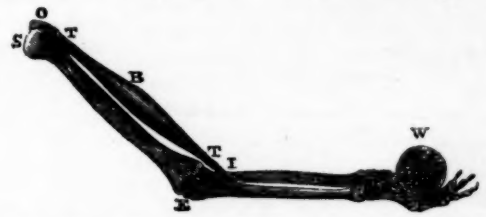
L. The Os Innominata, or unnamed bone, forms a part of the Pelvis or cavity of the hips in which the abdominal viscera rest.

N. Is the Femur, or thigh-bone, the head of which occupies a deep socket in the Pelvis bones—O, the Patella, or knee-pan, which serves to protect the joint, and as a point of attachment for muscles—P, shows the Tibia, or largest bone of the leg, Q, the Fibula, or small bone of the leg.

The bones of the foot are numerous, and so arranged as to constitute an arch, which arrangement not only gives strength to the foot, but such elasticity to the tread as to add grace and speed to the walk, and reduce the shock upon the brain and other parts of the system which is incident to walking erect. The spine of quadrupeds being horizontal, and the brain suspended on the neck, an arched foot is less essential than in man, whose system, being erect, constitutes a column.

To this bony frame-work the muscles are attached, by the contraction of which all the motions of the body are made. The muscles are those compact bundles of fleshy fibers distinctly seen on removing the skin and fat, and constitute the red fleshy part of meat. Each muscle is composed of innumerable fibers, or threads, and is packed in a membrane, or sheath, of its own, and they may interlace and cross each other and work freely without chafing.

The middle of a muscle is called its belly, which, by being acted upon by nervous energy sent to it by innumerable nervous fibers cause it to contract, and thus produce motion. The following figure represents the bones of the arm with everything dissected away but one muscle, O, B, T,



the function of which is to bend the arm. O, the origin of the muscle at the shoulder. B, the belly. I, the insertion upon the bone of the forearm, forward of the elbow joint. When the belly contracts, the lower extremity of the muscle at I, is brought nearer to the origin or fixed point O, and by thus bending the arm at the elbow joint, E, the weight, W, in the hand, is raised. The tendons, T, T, firmly attach the muscle to the bone.

We here present a full length view of the muscular system.

MUSCULAR SYSTEM.

They are seen in ridges and layers all over the body, sent out in different directions to effect the complicated movements of the system. These are all connected with the mind by means of the brain and nervous

system, and hence it is that the muscular motions are obedient to the will.

A. the muscle called Platysma Myoides. It arises on the shoulder and breast, and attaches to the lower jaw and aids some of the motions of the head, and especially the depression of the lower jaw.

B. Deltoides. Attached to the clavicle or collar-bone, to the spine and scapula or shoulder-blade, and serves to raise the arm and assist in every motion of the arm, except depressing it. Tight dressing of females across the shoulders deprives them the free use of this muscle, than which no one is more useful.

C. Mastoides. Attached to the mastoid process, a bony point behind the ear, and to the Sternum, or breast-bone. It is often called a cord of the neck. Its leading office is to give the head a rotary motion, as when we shake the head.

C. Biceps. Arises in two parts under the Deltoides and passes over the front of the arm, and is attached by a strong tendon to the radius of the forearm, and serves to bend the arm at the elbow. This is the muscle shown in the drawing of the arm, raising a weight. It is the one which swells out so prominently on the arm when we forcibly flex or bend the elbow.

I. Pectoralis. Arises from part of the Clavicle, from the Sternum, and from the six upper ribs, and is inserted by a very strong tendon into the Humeris, or arm-bone three inches from its head. Its uses are to move the arm upward and forward. There is a muscle on the back which acts in opposition to this to produce a reciprocating motion. This principle holds with nearly every muscle in the body, which act like counter-braces, or guy ropes.

K. Obliquus Descendens. This muscle is broad and flat, covering the last two true ribs, and the five false ribs, and aids in compressing the chest to expire the breath, and to discharge the contents of the stomach and bowels.

L. Rectus. Arises from the Sternum and the last two true ribs, and is attached to the Os pubis, or bone crossing in front between the hips. Its uses are to raise the body when we lie on the back, and sustains it when bent backward. There are seen in this muscle several light marks which seem to divide it into three parts. These are tendinous bands.

O. Sartorius, (from Sartor, "a tailor.") Arises from the upper and forepart of the unnamed bone of the pelvis, (see S. in the skeleton,) and passes obliquely over the thigh, and is inserted in the inner and upper part of the tibia, or largest bone of the leg. Its uses are to cross the legs in the manner tailors sit, and hence its name. In standing if you would raise and turn the right foot to the left hand, this muscle performs the act.

P. Tensor Vaginæ Femoris. Arises near the Sartorius, and passes around the outside of the thigh, and is attached by a tendon to the upper part of the tibia. It serves to draw the leg and thigh outward.

Q. Gracilis. Attached to the Os pubis, and passes along the inner part of the thigh, and fastens to the upper and inner part of the tibia. It helps to bend the leg, and assists to bring it and the thigh inward, and acts as the antagonist of P. T. serves a similar purpose of Q.

V. W. X. Arise from the top of the thigh-bone and pelvis-bone, and terminate in one strong tendon which passes over the patella or knee-pan, to which it adheres and fastens to the upper part of the tibia, or shin-bone. Their use is to extend the leg.

Y. Gastrocenemius. Arises in the lower part of the thigh-bone, and swells out broadly, constituting the calf of the leg, and is extended to the heel, forming what is called the tendon Achilles, or heel-cord. It serves to extend the foot—is much used in dancing and walking. It is this which sustains the foot when we stand on the toes, or bear the weight on the ball of the foot.

All these muscles and many hundreds more are organized for the purpose of producing motion, and the exercise of each is designed to give pleasure, as well as to minister to health and happiness. Any system of dressing, therefore that in any degree interferes with their full and unrestrained exercise is a violation of a primitive and fundamental law of our being. Tight strapped pants, and tight coats, make men walk and move with a mechanical stiffness quite unnatural. Tight-lacing, that seven-headed curse of females, with its stays and whale-bone, is a system of prolonged suicide which, at this day, can hardly be excused on the score of ignorance. Muscles are provided to brace the spine, and if we exercise them properly they will do it without the aid of whale-bone or lacing-stays, which weaken the muscles by disuse. How would a horse work or travel, and how breathe and enjoy life with a row of barrel-staves tightly laced around him from shoulder to hip with an inch rope? and yet slender and delicate ladies inflict upon themselves similar treatment, and wonder why their health is so very delicate. Should we treat a beast thus, and expect from him health and effort, every person of sense would regard it as the most ridiculous folly.

Men dress loosely, and can draw a deep long breath with nothing to oppose, and exercise all their muscles freely; add to this, active life in the open air and we have the secret of the superior health of man over that of woman. How long will mankind remain ignorant of the first principles of health? How long shall the shallow judgment of bearded dandies be the criterion of female beauty of form? Slender waists and small chests, in the light of scientific truth are a deformity, which pure air, loose dressing, and abundant and vigorous exercise will serve to remove.

MAGNETISM AND PSYCHOLOGICAL PHENOMENA.

In our article on Magnetism in the last number of this Journal, we spoke, in brief, of the strong sympathy which a person in a particular degree of the magnetic state, has with the various *sensations* experienced by the magnetiser. This we referred to the fact that the psychical essence of the magnetiser is, to an extent, transferred into the nervous system of the subject, and that by connecting and establishing *polar relations* with the psychical essence of the latter, it holds the same in subjection to itself, and thus renders its motions and circulations, upon which sensation depends, *coincident with its own.* From this same cause, even the *mental impressions* of the subject will often be modified to a greater or less extent, by the impressions of the operator, or even of surrounding persons, whose spheres communicate with his. Indeed, many instances have occurred within the personal observation of the writer, in which the magnetic somniloquist must have been sympathetically affected by the general mental atmosphere of the whole surrounding community, or been in *rapport* with persons residing a long distance off, and for whose spheres he may have had a particular affinity. For it should be known that to the human spirit, space is scarcely cognizable.

From ignorance of the extent to which this law of sympathy is sometimes applicable, many people have been led into the most grievous errors by directions received from persons in the magnetic state, and whom they erroneously took to be *clairvoyant.* Because they have been told, with astonishing correctness, things which were already known either to themselves, or to some other person (with whom the somniloquist might unconsciously have been in connection) they have been led to place implicit confidence in *other* announcements coming from the same source. The consequences of action based upon such information or advice, have sometimes been extremely mortifying and even disastrous; and the persons thus misled have been involved in extreme perplexity of mind, in endeavoring to account for the fact that so much error should come from the same source which almost miraculously gave forth so much truth! If, however, the principles unfolded in our last article are perfectly understood, this fact will cease to be so mysterious, and people will be placed on their guard against the delusions which may innocently proceed from magnetized persons in no higher state than that which we have described.

Into the minds of Magnetic Somniloquists of this same general class, any idea or impression, however absurd, may sometimes be infused by the direct will of the operator. He may, for instance, be made to lose consciousness of his own personal identity, and to believe himself some other person. Or if any image is vividly conceived in the mind of the operator, or any other person in thorough *rapport* with him, he will perceive the same image, though not a word be spoken. Thus a pocket-handkerchief, or a roll of paper, may be converted into the appearance of a serpent, a kitten, a child, a horse,

or any other object vividly pictured in the operator's mind. An imaginary barrier may be constructed before him, and he will walk to it, but cannot get beyond it. Experiments of this kind are familiar to thousands, and need not be particularly detailed. Of course, such phenomena are no longer involved in any very great mystery, if we admit the polarized unity and interblending of the mental essences of operator and subject, which we have supposed to take place in the magnetic process.

In the more perfect degrees of the general magnetic condition to which all these phenomena belong, there is an ability, on the part of the person magnetized, to detect even the ordinary *thoughts* of the operator, or of others whose spheres communicate with his own, even when no direct effort of the will is made to convey the impression. The writer has, in repeated instances, had his most secret thoughts revealed to him by Somniloquists with whom he has been in connection at the time, and I know of many others who can testify to the occurrence of similar phenomena.

To this it may be added, that the magnetic influence, being of a spiritual nature, and hence exceedingly subtil, is capable, in cases in which susceptible persons are allied to each other by strong spiritual affinities, or when projected by a vigorous effort of a clear mind, of operating at vast distances. Indeed, the space through which it passes seems to cause little diminution of its power, when all other conditions of its operation are favorable. In illustration and proof of this point, I will offer a few interesting facts which evidently come under the head of Magnetism, though this term has not been usually employed in connection with them:—

Mr. J. T., an intimate acquaintance of mine, and whose word is worthy of entire confidence, informed me of the following case in his own experience:—While residing in the Province of New Brunswick, many years ago, he one time, all of a sudden, received a vivid impression that his brother, to whom he was much attached, (and with whom he was doubtless unconsciously in magnetic *rapport*,) was undergoing the process of drowning. He appeared to be in, or near the water himself, and felt vividly the same sensations he supposed his brother felt. He afterward learned that his brother was, that very hour, actually drowned off Sandy Hook, near New York, while on his homeward passage from New Orleans!

It is known that the personal existences of some twins are so mysteriously interblended, as that, if one becomes sick, or experiences any accident, the other will feel it, even though the two are at the time separated by a long intervening distance. In illustration of this fact, Mrs. Crowe, in her "Night Side of Nature," mentions a case very similar to that related above. "A young lady, twin born, was suddenly seized with an unaccountable horror, followed by strange convulsions, which the doctor, who was hastily called in, said exactly resembled the struggles and sufferings of a person drowning. In process of time, the news arrived that her twin brother, then abroad, had been drowned precisely at that period."

But numerous cases might be related in which the sympathy between persons at a distance has been of a much more *mental* character. Take the following:—A. J. Davis, who is already extensively known as the author of a wonderful book, dictated while in the clairvoyant state, was once (being at the writer's residence in Williamsburg) fixing his mind *magnetically* upon a friend, for whom he was seeking some interior advice. This friend was also sojourning with me at the time, but was just then in an office in Fulton-street, New York, and was not aware that Mr. Davis intended to examine his case at that particular time, and did not, in the least, anticipate the results which followed. But it seemed that at the moment Mr. Davis had fairly and interiorly fixed his mind upon him, he was aware of it, and felt constrained to leave his companions in the office where he was, and go to Davis. He said it seemed as though Davis was calling him, or desiring and forcing him to come, and he proceeded with all possible haste, and arrived at my house before Davis had completed the examination. During his passage from the city to my residence, he was almost unconscious of outer things, but interiorly experienced all the sensations and impressions which it afterwards appeared Mr. Davis had concerning him, and in the precise order in which the latter occurred.

Jung Stilling, in his "Theory of Pneumatology," relates a similar case of a woman being drawn from her residence on a stormy and disagreeable day, contrary to her own personal desires, and brought into the presence of a woman in another part of the town, solely by the influence of the will, or the magnetic efforts of the latter.

There is now a little girl in New York, who, when absent from home, often knows the instant her mother desires her to return, and will immediately go, saying that her mother is calling her. Of this fact I am informed by a clerical friend, who is intimate in the family.

It would, indeed, be tedious to record a tithe of the cases which might be collected of this kind of magnetic action, and mental communication at a distance. Suffice it to say, that they may be reproduced, at almost any time, by a person of clear conceptions, and strong powers of concentration, if he can find a properly susceptible person, whose sphere has an affinity for his own.

If proper attention were bestowed upon this psychological law, and this kind of mental susceptibility were duly cultivated, who knows but that free and instantaneous mental communication might be had, under all favorable circumstances, by persons physically separated from each other by long distances, or even by the Atlantic Ocean? Probably the period is not far distant when such a mode of communication will be common, and brought to that degree of perfection in which it can generally be relied upon. It may even, by its commonness, be the means of connecting the nations by immediate fraternal intercourse; and by promoting daily communication with them, it may tend, more powerfully than any other cause, to fuse them together into one vast Brotherhood! If the bare mention of such a thing should seem to the reader perfectly visionary, I would ask, which of the more important improvements of the present day, would not have been considered equally visionary, if it had been suggested one hundred years ago?

The laws and phenomena of the sympathetic transmission of impressions and thoughts, of which we have thus briefly spoken, cannot be too deeply considered, or too thoroughly studied. They not only throw the most important light upon the nature and powers of the human soul, but they form the basis of some most interesting truths, with reference to the soul's connection, and possible open intercourse with a *higher world*, as the thoughtful reader will not be slow to conceive. There are, however, still higher Psychological conditions capable of being induced by Magnetism, and these may be considerad in a subsequent article.

W. F.

A New Form of Magnetism.—It is said that certain clock makers at Bristol, Connecticut, in making some chronometers lately, found it impossible for the workmen to keep awake when they were setting the instruments agoing. It is necessary, in regulating them, to count the beats in a minute by a regulator, and change the hair-spring until both go nearly in time; then the screw in the balance is turned until the greatest maximum is obtained, when they are rated and rate-registered. The workmen find no difficulty with the parts, but when the whole movement is going, any person who sits down and counts the beats, or watches the motion of the balance, invariably becomes drowsy. Attempts have been made with other clocks, but they do not produce the same sensation. The clocks are of polished work, and gilded by a peculiar galvanic process, which, if the facts be as here stated, may have something to do with the effect. What is curious is, that the person who is put asleep continues to count the beatings of the time with his hand or foot. The writer in the *Boston Post*, who gives an account of the matter adds:—

"It affords some amusement to visitors to see a company of men at work, and half of them asleep, yet laboring to keep themselves awake. Experiments have been made with strangers, and it invariably produces the same effect. On Saturday last a collier came to the factory with a load of coals, and was admitted into the finishing room to see the clocks. One of the workmen desired to make the experiment; accordingly the old man was put to count, striking on the bench with his hand in time with the clock; he fell asleep in three minutes, and was kept under the influence for nearly an hour. His dog that had followed him into the room upon discovering his situation exhibited alarm and ran about howling in a most dismal manner; all this did not disturb the sleeper, but the moment the clock was stopped he awoke, and was surprised that so much time had passed. There is some great principle hidden in these phenomena that is truly mysterious—*Exchange Paper.*

Mind or spirit is of itself embodied and living form. It is spritual organism, is in absolute perfection, and from mind itself all form and beauty emanate. The body of man is but an outshoot or manifestation of his mind. If I may be indulged the expression, it is the ultimate of his mind.

Agricultural Department.

THE APPLE.

No fruit has so world-wide a renown as the apple, and none is so universally useful. All our varieties of apples originated in the crab, which seems to bear a very slight resemblance to the Pippin, Baldwin, Pearmain, Seek no Further, or Golden Sweet. These splendid varieties have been produced by long and careful culture, and by crossing. The crab is still wild in most parts of Europe. The apple-tree is very hardy, and flourishes in all temperate climates, and especially in the northern parts of America. No part of the world produces finer fruit, or in greater abundance. The apple requires less careful culture than any other fruit, yet none better repays extra attention.

The tree is comparatively slow in growth, and frequently attains a great age and size. "In Duxbury, Mass., is a tree, which, in its girth, measures twelve feet, and which has yielded, in a single season, 121½ bushels."

This fruit, by a little care in securing the proper varieties, may be enjoyed every month in the year. The earliest may be obtained the latter part of June, and the best keepers will last until that time. As an article of common food, and as a dessert, it is surpassed by no other fruit, and should constitute an important article of diet, as it is exceedingly wholesome, cooling, and laxative, and contains that amount of acid necessary to keep the digestive organs in good condition. Dispepsia, that pervading complaint of late years, might be avoided, if mankind would use less concentrated food, and eat abundantly of fruit, particularly apples.

The *Water Cure Journal* has some very sensible remarks on this subject which we think will interest the reader:—

"We have, more than once, predicted that the time will come when fruit will be substituted for flesh as an article of diet. Our own experience has quite satisfied our mind on this subject.

"The importance of apples, as food, has not hitherto been sufficiently estimated in this country, nor understood. Besides contributing a large portion of sugar, mucilage, and other nutritive matter, in the form of food, they contain such a fine combination of vegetable acids, abstractive substances, and aromatic principles, with the nutrive matter, as to act powerfully in the capacity of refrigerents, tonics, and antiseptics; and, when freely used at the season of ripeness, by rural laborers and others, they prevent debility, strengthen digestion, correct the putrefactive tendencies of nitrogenous food, avert scurvy, and probably maintain and strengthen the powers of productive labor.

"The operators of Cornwall, in England, consider ripe apples nearly as nourishing as bread, and more so than potatoes. In the year 1801, a year of scarcity, apples, instead of being converted into cider, were sold to the poor; and the laborers asserted that they could stand their work on baked apples, without meat; whereas, a potato diet required either meat or fish.

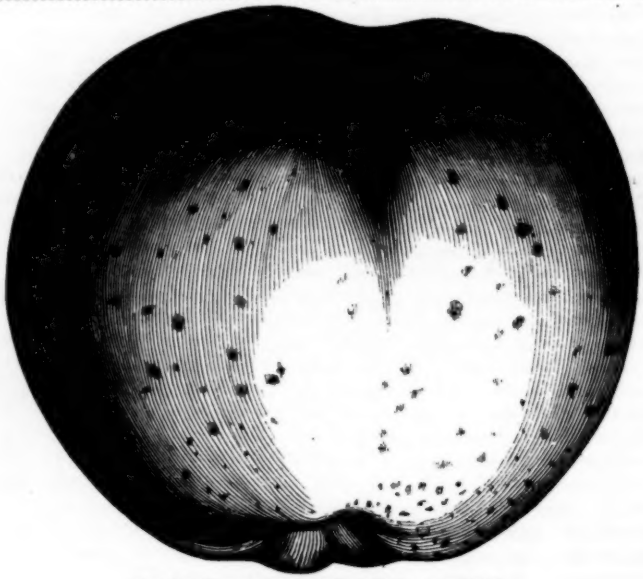
"The French and Germans use apples extensively; indeed, it is rare that they sit down, in the rural districts, without them in some shape or other, even at the best tables. The laborers and mechanics depend on them, to a very great extent, as an article of food, and frequently dine on sliced apples and bread. Stewed with rice, red cabbage, carrots, or by themselves, with a little sugar and milk, they make both a pleasant and nutritious dish.

"If our friends will only provide themselves with plenty of choice fruit, we will venture that not one *man*, *woman*, or *child*, in fifty would care for animal flesh to eat. Who doubts, for a moment, that many scrofulous and other diseases are traceable to a flesh diet? It is well known that *much* of the meat we eat is in a diseased state when slaughtered, and its effect may be well imagined. Yet our *fruit* is always in a healthy state, and cannot generate disease in the human body; but it has a diluting, purifying, and renovating tendency."

The best mode of propagating the apple, is to plant the seed in autumn, in broad hills, in mellow soil, and when the seedling plants are about a quarter of an inch in diameter, they should be planted in nursery rows, one foot apart, the soil always kept loose, rich, and free from weeds, and the ensuing autumn budded about four inches from the ground. We have not room, in the compass of this article, to describe fully the proccess of budding and grafting fruit-trees. This we shall reserve for a separate article, or series of articles, which will be illustrated by appropriate engravings. We will just remark that scions should be cut in February or March, and kept in a cellar, until the time of grafting, which is usually done in April or May. This allows the sap to flow freely in the tree, while the scion being without sap, the more readily receives it from the stock, and thus a circulation is at once established. We have cut scions the first of March, and put them in when the trees were in blossom, and had twenty-nine out of thirty-two scions live, in a single tree which we were reclaiming.

If our friends will cut and store their scions this month, we will give an article on grafting in the April number; and we hope many orchards will this year be changed from vicious, nurly cider apples, to choice varieties for the palate and the market.

Meanwhile, we enter our protest against pruning in winter, as the wounds will dry and crack, admitting water, and producing decay. The leaves should be on, and the sap in the branches. The leaves will shade the parts wounded, and the sap will keep the ends moist and commence the work of healing them over. If the limb be large, a composition should be applied, to prevent drying, and keep out water, and to aid in the healing process.



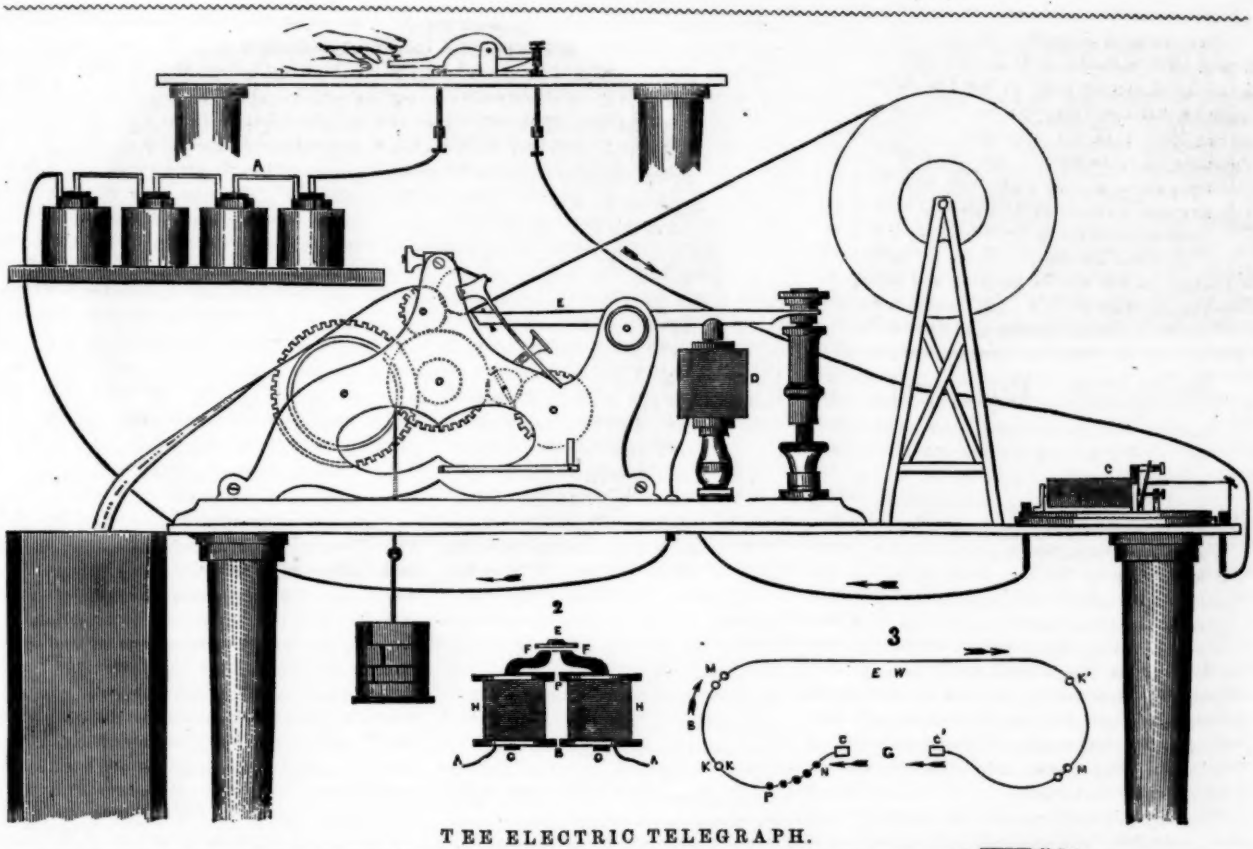
DOUSE, OR HAWLEY APPLE.

DESCRIPTION.—Very large, nearly round, slightly flattened, somewhat irregular and ribbed; yellowish green, usually passing to pale yellow, when ripe; stalk slender, three-quarters to an inch long, set in a wide, deep cavity, and usually scarcely projecting to the rim; calyx in a narrow, and rather deep, regular and somewhat furrowed depression, though sometimes but slightly sunk; flesh of a fine texture, very tender, subacid, and of excellent flavor. It ripens from the first to the middle of autumn. The tree, in the nursery, is of a moderate growth, but in the orchard, it forms a well spread and good shaped tree, and produces great crops every year.

For flavor, size, and production, this is believed to be the best fall apple known, either for dessert or market purposes. This fruit was first brought before the public by us in 1846.

A description and outline can be seen in the Cultivator of April, 1847, from which we quote:—"Of all the varieties of apples which have lately been brought to notice, probably none is destined to become more and deservedly popular than the Hawley, or Douse." Also in the Horticulturist of July, 1847, Hovey Magazine for December, 1847, and the Genessee Farmer of May, 1848; the latter, in describing it, adds:—"The first time we saw it, was at the State Fair at Auburn, in 1846, when it was exhibited by E. C. Frost, of Chemung county, as the Douse. His specimens were monstrous, and we well remember the commotion created among the promologists present, to all of whom it seemed unknown."

* For the above engraving, and description of the Hawley, or Douse apple, we are indebted to our friend, E. C. Frost, of the "Seneca Lake Highland Nurseries," Catharine, Chemung Co., N. Y.



TEE ELECTRIC TELEGRAPH.

Mechanical Department.

THE RANGE OF MECHANICAL INVENTION IS A TRUE INDEX OF HUMAN PROGRESS.

THE ELECTRIC TELEGRAPH.

BY ROBERT MACFARLANE.

The "Electric Telegraph" is one of the most wonderful inventions of this, or any other age. As a machine, although its operation is exceedingly simple, and its parts far from being complicated or large, its achievements are of no ordinary character, and its powers are more akin to the workings of what is known to us of *spirit*, than concrete matter. It is a dwarf in stature but a giant in power. It is so small that all its parts may be safely packed into a gentleman's coat pocket, and it will occupy no more space on a table than a teapot, yet it will transmit a message from pole to pole, swift as the "twink of an eye." Although the telegraph has been in public operation for six years, not many are acquainted with its nature and operation. To be intelligent in this age, it is necessary to have an acquaintance with the progress of physical science; and certainly mechanical inventions occupy a very prominent position in it. To convey to all, a clear and simple idea of the principle of this invention—the Electric Telegraph—is the object of this article. There are three Electric Telegraphs in operation in America, all of which are the subjects of different patents. The one we have chosen to illustrate and explain, is the oldest, most extensively employed at present, and has no superior. It is the invention of Professor Morse, and is termed "The Electro Magnet Telegraph." The figures in the engraving are selected and arranged to represent and explain a line of telegraph between two separate places; and the parts exhibited are designed to render the subject easy of apprehension.

As steam is the moving spirit of the steam engine, *electricity* is the moving spirit of the telegraph. Electricity is supposed to be a subtile imponderable fluid, pervading all space. It is still, in a great measure, wrapt up in mystery; all we know about it, is by its effects, two of which are distinctively daveloped and termed, its attractive or mechanical force, and its chemical or resolving force. It is generated with great rapidity in a galvanic battery, and it can travel along good conductors at the rate of 200,000 miles in one second. There is one thing very singular about it, viz., the development of its force, none of which is exhibited unless there is formed what is termed "an electric circuit." This circuit may be a metal wire, or metal plates, or what are known as "conductors," which must be connected in some way with both ends or poles of the battery. By breaking and closing this circuit, the force of the electricity is called into action and suspended, and by this means the telegraph is operated, in other words, messages transmitted from one place to another. The electric force employed in this battery is mechanical. Let attention now be directed to a description of the engravings. The four cylindrical vessels, marked A, is the galvanic battery. Any number of cylinders may be employed—from ten to thirty are used in telegraph batteries. A cylinder of zinc and a thin plate of copper or platina, separated by a porous earthenware vessel, and all placed within a glass vessel containing weak sulphuric acid surrounding the zinc, and the platina dipping into weak nitric acid, in the porous vessel, forms a battery and generates electricity. Every one cylindrical vessel shown above is just a duplicate of another, and the whole are united to form a powerful current, like two or more boilers being used for steam. To form the electric circuit, one end of a copper wire is attached to the end platina plate, and the other end of the copper wire to the zinc cylinder. A wire is not required to run round all the circuit—any metallic connection,

such as brass plates, &c., &c., may form part of it. The battery A, and the small table above it, we will suppose to be at the Philadelphia station, and the Telegraph Register, below, to be at New York. A wire runs from the platina plate up to the metallic connection on the small table above, and the other wire runs from the zinc, and is connected with the first wire by the metallic connection of the register at New York. This forms the circuit. B, on the small table above, is the key for breaking and closing the circuit. This key is a pretty long pen, for it is the little metallic gentleman that writes away at New York. This key is fixed upon a pivot axis, and is nicely ballanced to be gently pressed by the operators' fingers on the top of an ivory button. The circuit is now broken, and a small gap in the key above the wire from the battery, shows the metallic connection to be open. A spring in front keeps up the key when not working, but by pressing upon the butt end of the key, its metal surface comes into contact with the metal termination of the wire from the battery, and then the circuit is closed, and the electric fluid fleets along to New York. The question may now be asked, "how can the breaking and closing of the circuit make marks on a piece of paper in New York? Will not the current just run along when the circuit is closed, and then stop when it is broken?" Yes, it will. "Well, then how can it write at New York?" We will tell. If a narrow strip of white paper be drawn by the left hand against, and under a small metal roller with a groove running around it, then by strking suddenly with the right hand a pointed instrument (not sharp enough to cut) up against the paper, into the groove of the roller, and then suddenly dropping the hand, an indent, like . will be formed in the strip of paper. If the instrument instead of being suddenly dropped, is held against the paper for a short time, a mark like —— is made. Out of these two marks, with spaces between them, the alphabet of this telegraph is formed; and we will now show how this is done.

At the right hand of the figure, there is a roll of narrow paper, made for the purpose, like a web of ribbon. This ribbon of paper is represented passing from the roll between two small metal rollers of the register. This strip is drawn through between the rollers by their motion, they revolving towards the paper roll, and like callendering rollers, drawing in the paper. Motion is given to these rollers by a train of clockwork gear wheels, which are moved by the weight seen below the machine. This weight is attached to a cord passing over a small drum, and the motion of the drum, as the weight descends, is communicated to the feeding-in rollers. The upper small roll, represented by dotted lines, has a small groove running around its periphery, and the ribbon of paper, it will be observed, is drawn through against its under surface. The instrument to indent the paper is a pen-lever, E. It is suspended on a pivot axis, at its middle, and its action is like a a walking beam, but the stroke it makes is very short—not over the one-eighth of an inch at both ends. This pen-lever is very nicely poised, and at its extreme end from the paper, its stroke is nicely regulated by a set or button screw. The inner end of this lever has a metal pointer, as is shown in the engraving, passing up through it, nearly touching the strip of paper. If the finger is put upon the end of this pen-lever, above D, and worked like the key of a piano, the pointer will strike up against the strip of paper, and make the kind of marks we have already spoken of. A dot will be made by a quick tap, and a dash by pressing a little longer on the lever—geometrically speaking, a succession of dots forms a line, and the combination of these dots, .. dashes, — and spaces, form the following telegraphic alphabet:—

The dash or line is equal to two dots. The letter A . — dot and dash, is, therefore, equal in time to three dots; the letter B — ... dash and three dots, is equal to five dots, and so on. So too the space is equal to one dot; C .. . two dots, space and dot, is equal in time to four dots; the same with its reverse, R . .. a dot, space and two dots, equal four dots in time. The dash is made by pressing the finger upon the key on table, the length of time necessary to make two dots. Here is the alphabet, with the figures, viz:—

A . — B — ... C . . . D — .. E . F . —.
G ——. H .... I .. J —.— . K —.— L ——
M —— N —. O .. P ..... Q .. — . R . ..
S ... T — U .. — V ... — W. —— X. —..
Y .... Z ... . & . ... 1 .——. 2 .. —..
3 . . . —. 4 .... — 5 ——— 6 ......
7 ——.. 8 —.... 9 —.. — 0 ———

L is a dash of double length, or equal to four dots, and the cypher is a dash of treble length, or equal to six dots in time. It will be observed that no letter or sign exceeds in time six dots, and that Professor Morse has so admirably arranged his alphabet, that the letters most used in the English language, as for instance, E and T take the least time in their manipulation.

The question now to be asked and answered, is, "how is this lever or walking beam pen made to vibrate up and down by the electricity, to indent the paper, and write these characters?" This is done by the electro magnet, which developes the mechanical force of the electricity. D is the "electro magnet." This magnet is represented by 2 below the register. It is made of a piece of soft iron, pure and free from carbon, sulphur, &c., &c., and is wrapped round with very fine copper wire, covered with silk. This coil of the wire is called a *helix*. It is attached to the wire of the battery by a metallic connection, at one end, and the other end of the helix—for it must be made of a continuous wire—is attached to the wire from the other end of the battery, thus forming part of the electric circuit. This magnet is made almost of a U form, but the form is not so essential. It looks almost like a double spool of silk. H H are the helices wrapped round the legs of the soft iron. The wire from one, passes at the top to the other at P. A A are the ends of the wires attached to the coils. C C are wooden heads, to isolate the magnet on the table from any metallic connection, except the coils and the pen lever. F F are the prongs of the iron magnet, and E, represents a piece of bright iron on the pen lever. The top and bottom heads of the coils are buttons of ivory. The legs of the magnet are joined below. If the piece of metal E is made broad, the prongs F F need not be bent at all, for the ends of the magnet projecting above the top ivory button, will answer every purpose. The electro magnets now used are very small and neat, in comparison with those that were employed five years ago. The permanent magnet, or loadstone, will attract a piece of iron and hold it with great force, but the electro magnet has no attractive force, except when the electric circuit is closed, and the fluid rushing along the wire, and then its attraction is considerable. This is the difference between the permanent and electro magnet. The end of the pen lever has a piece of iron on it, above the magnet, therefore, when the operator at Philadelphia presses his hand upon the key B, the circuit is closed, the end of the pen lever above the magnet D is drawn down to the magnet, and the pointer at the other end is thrown up against the strip of paper. If the key is quickly tapped, a dot is made on the paper; if the key is kept down a little longer, a dash is made. Whenever the finger is lifted off the key, the circuit is open, the magnet loses all attractive power, and the pointer then drops and does not touch the paper. As the paper is moving along, spaces are made, when the pointer is down. It will thus be observed, that by tapping on the key at Philadelphia, the circuit is broken and closed to New York, and the electro magnet, D, actuates the pen lever to produce the characters we have described, which are put together to make words, and the words then put together to make sentences. The electro magnet performs a most important office, a permanent magnet would not answer at all. We are indebted to Professor Oersted, of Copenhagen, Denmark, for the discovery of the electro magnet, in 1820. Previous to Professor Morse's application of the electro magnet to telegraphing, the magnet was used to deflect needles, in what was termed the "signalling telegraph. The making of permanent telegraphic marks is altogether better than mere signalling. Even if no one is present at New York to witness the tracing of the

electric pen, the lightning fluid cannot fleet along on its course without leaving a permanent record of what has been whispered into his ear at Philadelphia. We have thus explained the operation of a line of telegraph, and we hope we have done this so plainly, that he who readeth may understand, and be able to tell how

"Along the smooth and slender wires
The sleepless Heralds run,
Just as the clear and living rays
Go streaming from the sun:
No peals or flashes heard or seen
Their wondrous flight betray,
And yet their words are plainly felt
In Cities far away."

Although a key is exhibited as placed at the Philadelphia station only, yet there is a key and register placed on the same table at every station; this is necessary for the reception and transmission of messages. Each station has a battery also, and each register a "multiplying magnet" connected with it. This magnet is represented by C, and is placed in connection with the register at the end, where the positive current is received from the battery before it reaches the register. The object of this magnet is like that of a dam for gathering water to drive water-wheel. It is a reservoir and regulator of electric force. Without it, telegraphing between distant places would be out of the question. It will be observed, that the circuit must always be closed to make a mark; therefore if the key at New York, and the key at Philadelphia were both up, the closing of one key would not answer for the transmission of a message; and unless there is some way provided to meet this exigency the circuit cannot be closed. This is done by having a metal button and approaching wires placed under each key, so that when the operator at Philadelphia is sending a message to New York, he disconnects his buttons with the wires; but when he has no message to send, and his key is up, he closes the circuit at his tables by turning his metallic button under the key, bringing it in connection with the two wires spoken of, which are attached to the wires of the line. There is a great deal connected with the harmony of the electric fluid—if we may use such an expression—by the operators. It requires practice and close attention to acquire the knowledge requisite for such an office. No multiplying magnet is required for a short lime; according to the force of the current, so will there be a development of the same at the magnet C. A small spring arm is used to test the force of this current.

It has been stated that there must be a closing of the electric circuit, or there would be no development of electric force. For example, if a metal wire, a mile long, connected the two ends of the battery, and the current was exhibited actuating a pen-lever at the middle of the circuit, if in an instant the wire was broken at the middle, all development of the current would cease at once in every part of the circuit, even at the very end of the battery. Some have compared the wire of the circuit to a tube containing water, which if actuated at one end, transmits action in an instant to the other end; but the comparison is not a good one, for if the tube is broken, no action is necessarily suspended, except for distance. Another view of the electric action is, that no current fleets along the wire —that the arrows representing a positive current moving in one direction, and an opposite current supposed to be moving in a contrary direction, are both purely imaginary—the one a hypothesis, the other an illustration. It is supposed by this class of electric theorists that the wire is not a highway for the fluid, but that the wire itself exhibits electric phenomena throughout its entire length, and that the connection of this wire with the battery produces a new arrangement of its own particles which for the time it is connected with the battery, invests it with new properties, namely, electrical ones. This view of electricity is the same as that held by very many philosophers, but one solid objection to this theory is, that if the conductor—the wire—be thinned off in any part of the circuit, great heat is developed in that particular part; this would not occur if its molecules merely exhibted a new arrangement. There is still a more singular phenomena than any we have yet described connected with the telegraph—this is making the ground-part of the circuit. The line of telegraph represented in the engraving, which unites New York and Philadelphia, is made up of a metallic circuit, and we have stated that there must be an "electric circuit" formed, or the electricity will not be developed. An electric circuit, however, can be formed between New York and Philadelphia with only one wire. This plan is represented by figure 3. The ground, by this arrangement, is made to form part of the circuit. B represents Philadelphia, and the opposite end New York. C is a large sheet of copper, to which a wire is soldered, and connected with N, the negative pole of this battery. This sheet of copper runs down into a wet place in the earth. From the positive pole, P, of the battery, the wire proceeds to K K, the key, then to M, the register, then along the east wire to K—the key at New York, then to M, the register, thence to another metal plate C, buried in the ground. From C, at New York, to C, the plate at Philadelphia, the ground, G, forms part of the circuit. The use of the ground, as part of the circuit, is not a little mysterious—the fact, however, is beyond all question. It is asserted by some that the current from C, at New York, fleets in an instant to the pole from whence it started. Mountains, rocks, rivers, and seas, upon this hypothesis, form no barrier to its instant flight.

"It wadeth the waters deep, deep, deep,
And it climbeth the mountains steep, steep, steep."

Although messages can be sent betwen distant places with one wire, yet for convenience and the quick transaction of business, two wires are employed between important stations, just like two tracks on a railroad.

The system of telegraphing—its practical working—is greatly improved from what it was a few years ago. The relay-magnets, whereby messages can be transmitted at once to great distances, is a most vital part of telegraphing. America is the country where telegraphing is most highly developed. In 1844 there was only one short line from Washington to Baltimore, a line constructed by a Government appropriation, and lo! what have we now in seven short years? No less than 20,000 miles of lines. (The exact number of miles we have not been able to ascertain—one account says 30,000, but one long engaged in telegraphing says, put down the 20,000, and you will be sure not to over-estimate what has been done.) The first line formed by voluntary subscription, was the one between New York and Philadelphia. Dr. Doane, so well known to the public, was a leading man, so was Mr. Norton and a few other enterprising gentlemen of New York city. The construction of this line required no small amount of faith in its ultimate success, few believed that its originators were "casting their bread upon the waters, expecting to find it after many days." Many laughed at the first stock-holders for being so foolish as to deceive themselves; and we have it from one, who, when he was erecting the first poles in New York city, came very near being drubbed by two of our pugnacious citizens, "for making fools of them," as they said, by simply telling them in all candor what the object of his labor was. Wherever we go now, there we see suspended the slender electric cords, and as we gaze upon them, the mysterious reflection arises in the heart, that within their narrow circumferences, messages of love, hope, fear, and woe, are "fleeting onward evermore." The telegraph has wrought great wonders in our commercial and literary community, since it was first established. If it is very cold in Quebec, Halifax, Boston, or Buffalo, to-day, the daily papers in New York, to-morrow, will re-echo the voice of the telegraph, "by the mark 6°, or 10°, or 20° below zero." If a storm is galloping down Chesapeake Bay, in an instant the fact is known at New York. Our Astronomers at Harvard, Washington, and Cincinnatti, make known the result of their observations in an instant, to one another, and then it may be said, "the rolling spheres and earth hold converse nightly."

The telegraph, by the information which it communicates, prevents many accidents, and renders our commercial community more safe in their transactions. It warns distant places of

the escape of criminals, and to the forged draft it presents an insuperable barrier. Friends, separated by many weary miles, can hold converse sweet, and talk of future hopes, or "days of auld lang syne." The poney-expresses of our newspapers are gone forever, and what a sorry competitor does the swiftest iron-horse make with *Frank-lightning* in his wirey saddle.

The history of the telegraph, from its incipient stage to its present beautiful and useful development, has been a step by step advancement. It is not possible to go over the subject minutely, but we must take a glance at it. It is very singular that a magneto, signalling telegraph, was described by Faminus Strada, a Roman historian, poet, Jesuit, and teacher of eloquence, who lived in the reign of Pope Leo the X, in the 16th century, and who has been in his grave for nearly 300 years. In one of his proclusions he describes two friends, who by the help of a certain loadstone, went into their chambers at a certain hour of the day, and each being possessed of a needle, and a dial plate with the letters of the alphabet on it, they could converse with one another. Here is the way their operation is described. "If one had a mind to write anything to his friend, he directed his needle to every letter that formed the word he had occasion for. The friend in the meantime saw his own sympathetic needle move to every letter, and thus in an instant they talked together across a whole continent." This is a very singular record, rather a prophecy of the invention of the telegraph. Had Strada seen Wheatstone's he could not have described it more accurately. An account of this is to be found in the Guardian of Addison, No. 122, published July, 1710, and the copy from which we take the above was published in New York, in 1811. If the modern telegraph could just be operated without wires, like that of Strada, then we would have an invention which would be the climax of all others.

A Voltaic Electric Telegraph was invented by Soemering, a German, to act by the decomposition of water, in 1809, and many attempts were made to perfect a telegraph, up to the time when Professor Morse's first line was established in 1844. The first efforts of the American invention exhibited a very indifferent machine, from that represented in the accompanying engraving. It was first conceived in 1832, but it required great labor, perseverance, and many years of experience and experimenting to bring it to what it now is.

What the future influence of the telegraph may be on the customs and habits of society, it is scarcely possible to conjecture. If we may judge from the past, (not a bad rule,) its influence will be almost omnipotent. The time may yet come, when, so far as letters are concerned, the Post-office may become a dead letter box, when upon the wings of electricity all men will dispatch their thoughts, and postage letter stamps will become as great subjects of wonder in the cabinets of antiquarians, as the Egyptian Hieroglyphics now are.

The other two telegraphs in our country, are said to be in very successful operation. House's Telegraph is far more complicated than the one described, and is no doubt more expensive; but it is a very ingenius and beautifully operating instrument—it prints its messages in plain Roman chaaacters. The chemical telegraph of Bain does not employ any magnet. It marks on a strip of paper, prepared with the prusiate of potash. The pen is of iron, and it is kept in contact with the paper, and by the passage of the current from the point of the pen, a small portion of the iron is decomposed, which uniting with the prusiate of potash, forms the prusiate of iron, and leaves a blue mark on the paper. It is a very simple and beautiful invention also. The gentle hands of females appear to be well adapted for striking the electric lyre. The labor appears to be suitable and light, and in many cases it would be well to employ them.

A telegraph line across the Atlantic has been talked of, and no doubt could be constructed, but those capable of forming a good opinion, believe that the expense of keeping it in repair would far over-top its profits. The earth will no doubt yet be belted by an electric railroad. France and England are now united by electric bands, and their are some who are now alive that will see the electric wires stretching beyond the Rocky Mountains, passing under the sea at Behrings Straits, and then stretching away through Asia, and Europe, to the Volga, the Rhine, and the Thames, until the terminal plates of the battery will look out at one another across the Atlantic, and speak to one another from Wall-street, in New York, to Lombard-street, in London—who does not sigh for the ambitious honor of flourishing the first electric pen at New York, which will transcribe, at the same moment, it may be, its message within the Court of St. James.

* In relation to this theory, a writer in an able article in the *Edinburg Review* cooly disposes of all objections to it, by saying, "electricity, like a prudent general, always takes care that a retreat is provided for, before it begins its march—no electricity will be set free until an unbroken circuit of conductors connect the terminal plates of the battery, and a stratum of moist earth answers for part of the circuit." This theory we must adopt until we get a better, although it is a tough looking one to digest. It has, however, some strong arguments to support it. One is, that the electric fluid, from the positive wire of the battery, will pass through streams, and has been made to pass through rivers, without any wire. But still for all this, the great drawback to uniform telegraphing, is an imperfect insulation and connection of the wires.

Educational Department.

EDUCATION.

BY WILLIAM ELDER, M. D.

NUMBER III.

We remarked in a former number, that man's social and moral progress had never been in the same ratio with his intellectual advancement; and we are led to inquire earnestly into the cause of this wrong. We cannot charge the blame upon the Creator, for God has pronounced all his works perfect; the fault is then in man.

The Governments of the earth have not been suited to man's nature, as a progressive, moral being. Monarchical Governments are of this character. They check freedom of speech and the liberty of the press; keep the millions in ignorance; trammel them with a national religion, which begets intolerance and its long train of evils; and grind them to the dust with the most oppressive taxation, to support the few, who arrogate to themselves all the glory and honor of the nation, in worse than useless luxuries and the vain and graudy trappings of royalty. The laws of such Governments must, of necessity, be those of strong, unyielding forced, no other could keep a people so oppressed in subjection.

In a Republican form of Government, there are no galling distinctions of rank, that degrade one man in the estimation of another; but the poor is on an equality with the rich, and if he have not so many pennies in his pocket, he has what is better than wealth—self-respect, and an indomitable perseverance. Freedom of speech, and liberty of the press, are the bulwarks of a Republic; they insure its durability, they protect the majesty of its laws; through these agencies, the voice of the people is heard, and wrongs, of whatever character, can be redressed. Here, all religions are tolerated; each man can worship God according to the dictates of his own conscience. Thus, we find that a Republican form of Government is adapted to man's nature, as a progressive, moral being.

Republican principles contain the germ of universal freedom. The monarchies of the old world are destined to "overturn, and overturn," until they become entirely revolutionized,

and the whole globe be converted into a vast Republic. This glorious result is not far in the future. Already—

> "Freedom! Freedom! is the answering shout
> Of Nations, starting from the spell of years;"

As freedom of speech, liberty of the press, and religious toleration—those powerful influences that would produce the downfall of a monarchical, insure the perpetuity of a Republican Government—is it reasonable to suppose that the same civil and criminal laws would be suited to such opposite states of society as must exist under Governments so entirely antagonistical in their nature? Certainly not; and yet we retain many such for the government of the people of our glorious Republic. We are aware that the growth of a new system must always be slow; that mind cannot break away at once from old associations; that it is only by acquiring confidence in the operation of new principles, that it will be prepared to take another step forward. Our Republic has already solved to the wondering and admiring world the great problem of self-government; it only remains for her to adapt her laws to the improved social and moral condition of her people. Capital punishment is no better suited to the present advanced state of our society than Judaism—it is a law of force, had its origin in a barbarous condition of society, and was the the mode best adapted to the comprehension of an unenlightened people for redressing wrong, as was the religion of the same people, of the character they could appreciate, literal, but typical of a pure and spiritual worship. After the revolution of centuries, when mind was better adapted to a higher worship, the Creator, in obedience to the sublime and eternal law of progress, "sent the brightness of his own glory, the express image of his person," his only beloved Son, to reveal to man his increased moral obligations; and the whole mission of the Saviour, from the earliest period of his nativity, when all Heaven rung with hallelujahs of "Glory to God in the highest;" and angelic hosts on the plains of Bethlehem, in a grand chorus, responded, "Peace on earth! good will to man!" to the latest moment of his agonizing death, when "The vail of the Temple was rent in twain," and earth, shocked at the ingratitude of her sons, trembled and groaned from her deep center, and offered up to immortality the dead that slumbered in her bosom, was a mission of love—a living illustration of the great element of Christianity, *Love*—"love to God and man." The Redeemer's death was the grand climax of the love principle; the rending the vail of the Temple showed that God was no longer to be worshipped with forms, but with the heart; while the opening graves revealed the truth of immortality!

When God gave us the higher code of laws, he repudiated the old form, that required "an eye for an eye and a tooth for a tooth;" the "Lawgiver" says, "I say unto you, that ye resist not evil; love your enemies; do good to them that hate you; be not overcome of evil, but overcome evil with good" And shall we, who profess to believe in and be governed by these laws, go back to Judaism for a rule of life? "God forbid!"

But does a Christian community overcome evil with good, when it takes life for life? No; it overcomes evil with evil; and consequently presents further motive for the commission of crime. How? Because the punishment of the criminal presents the increased evil of murder and revenge; and as the punishment, in itself, is not adapted to the condition of man as a moral being, it is a violation of a moral law; and the sequel shows how fearfully the violation of this law reacts upon the community. We have but to review the records of criminal jurisprudence, to know that crime has advanced in society in an increased ratio with the number of victims. The reson is obvious; the remedy is not adapted to the disease, and the result must prove fatal. Moral remedies, and *moral remedies alone*, are adapted to the cure of moral evils. It is an eternal law of the Creator; we cannot violate it with impunity. Should we not think it a great absurdity, were a physician to endeavor to cure a fever by flagellating his patient? And is it not equally preposterous to believe that moral evils can be cured by physical punishment?

Corporal punishment in our navy is another crying wrong to man, and its effects upon the sufferer illustrates the same great principle, that brute force is not adapted to man's improvement as a moral being. Brute force applied to man, as punishment for sin, cultivates his animal not his moral nature. We were not surprised to learn, in reading the statistics, recently, of one of our best-conducted naval ships, during two years' cruise, that the number of lashes inflicted upon the unfortunate seamen increased each month, through the whole voyage, in a four-fold ratio! Again we say, man cannot overcome evil with evil; it is directly opposed to the moral government of God, and to man's nature, as a subject of that government.

How long, oh, how long, before a Christian people will learn this vital truth, that the whole spirit of Christianity is opposed to oppression and force; that it is a religion of love, adapted by the Creator to man's nature as a progressive moral being.

Education is a term of very broad signification. It justly covers the proper development of all the bodily powers, together with moral, intellectual and social culture.

MORAL CULTURE.

BY P. L. BUELL.

Of all the subjects relative to the temporal welfare of the human race, no one is of more importance than the proper cultivation of the moral faculties. Sacred and profane history assure us that the calamities which have befallen nations, as well as individuals, have, in numerous instances, been the result of a violation of the eternal principles of justice and truth. When these principles are disregarded by a nation, selfish ambition takes the place of genuine patriotism, and anarchy, misrule, and oppression, are the inevitable result. True morality is the basis on which the pillars of our own glorious republic rest, and if they ever fall to the earth, they will have been secretly undermined by cunning and designing men—great, perhaps, in "literature and science," but destitute of virtue.

In view of this truth, it well becomes us, as citizens of the "model republic," to examine our institutions of learning, and our whole system of education, parental and religious, as well as public, and ascertain if that attention is given to MORAL CULTURE which its importance demands. It is undoubtedly true that the cultivation of the intellect receives more attention in the United States at the present time than at any former period. But while we have been making rapid strides towards perfection relative to the best means of cultivating the intellectual faculties of the young, we fear that the training of their moral powers has been greatly neglected. The mode of conducting our elementary schools has undergone a great change within the past twenty years. It is evident that the change has been beneficial in many respects, but in others we fear it has had a deleterious effect. Any system of education which does not have an influence to make men *moral* and *good*, as well as wise, must surely be faulty. That it does not do this in our own country needs no other proof than a reference to many of our distinguished men, who unite powerful and highly cultivated intellects with gross immorality and vice. If this is not sufficient proof, a weekly review of the crimes and fraud committed, not by foreigners, but by our own countrymen, educated among us, will undoubtedly suffice for evidence on this point.

Man is so constituted, that unless the passions and propensities are kept in subjection to the moral powers, he will sooner or later be obliged to pursue the journey of life through the valley of sorrow and repentance, if he does not forfeit it by transgressing the laws of his country. Unhappiness and discontent are as sure to follow a course of immorality and vice, as that any effect will succeed its legitimate cause. The effects of some kinds of vice are more apparent to human view than others; and some individuals

seemingly transgress the commandments of Jehovah with impunity. But although the outward appearance and conduct of the vicious man may lead us to suppose that his conscience is perfectly at ease, still, if we had the power to fathom the inmost recesses of his soul, we should undoubtedly find that it is frequently goaded with the keenest anguish when reflecting on his past misconduct, and his immoralities, which may be known only to himself and his God.

The fact that the children of good and virtuous parents sometimes become notorious in the annals of crime, very naturally leads those who have committed to them the important trust of training the youthful mind, and directing it in the pathway which conducts to virtue and happiness, to inquire how can the moral culture of the young be so conducted as to secure the object desired? In answering this inquiry we would simply observe, that no one can impart proper moral instruction to the young, without some knowledge of the innate faculties of the mind. If children trained without this knowledge, and exposed to the powerful influence of evil example, as is almost universally the case, become honest and virtuous, it is more the result of *chance*, than the effect of skill in the important work of training the moral powers.

Some metaphysicians of former times have maintained that CONSCIENTIOUSNESS is not an innate faculty of the soul. Believing in such a theory a man could make no effort to train a child to do justly, with any hope of success; for it would be as impossible to teach morality to human beings as to the brute, that is entirely destitute of the moral sense. And it appears as if some intelligent persons of the present day believe that CONSCIENTIOUSNESS is not an innate faculty—for in training those under their charge, they attempt to implant within them the love of the moral virtues by the use of the *rod*, just as they would train a refractory horse, or dog which they might desire to do right. To a want of knowledge, therefore, of the nature of the mind, and especially of the moral faculties, may be attributed the main reason why so many children of the good and virtuous plunge headlong into the whirlpool of crime, and sink amid the surges of infamy. From ignorance on this subject arises, also, the evil of bad example. Some parents, who are considered respectable, honest, and even devout, think they have done their whole duty in respect to the moral training of their offspring, when they have warned them of the evil effects of immoral and vicious conduct. They see no harm in practicing deception in their presence, thinking the good precepts just instilled into their minds, will be amply sufficient to guard them against the vice of lying.

It must appear evident to every virtuous mind that a *reform* in our present system of education is very much needed. An elementary work on MORAL CULTURE, simplified so as to be adapted to the capacities of children in our primary schools should be prepared by some one as well qualified to the task as was Noah Webster to prepare a spelling book. And when such a work shall have been published, which, God grant, may be at no distant day, it should be placed in the hands of children as soon as they have learned to read. This would not only awaken the minds of parents to the importance of the subject of MORAL CULTURE, but the child would learn the philosophy of virtue, and an improved state of society would be sure to follow.

Home Department.

INHABITIVENESS.

BY C. D. STUART.

It scarcely matters where a man is born, whether amid the frost and snow of the Polar Regions, or in those southern climes where the verdure of earth is perennial, he loves, and to the latest hour of his life will love, his native land. It may be bleak and inhospitable; its government may be oppressive, still he clings to the soil on which he was born with an unfaltering affection, and whithersover he may go into other and more beautiful countries, his memory in waking hours and in dreams, wanders to his childhood's home—he cannot forget his fatherland. He loves it though it exiles him, and is proud of its name and fame, while its yoke sits galling on his neck. Love of country is a life-implanted sentiment, belonging alike to the rudest savage and the most polished civilized man.

And it is a beautiful ordinance in our nature that we are all pervaded by this sentiment. From this springs the fraternity of race and nation; the cohesion of individuals into communities, and the inclination of communities to a "local habitation and a name." From this, too, spring the strongest manifestations of brotherhood—man caring first for self, family and kindred, then for the community and nation to which he belongs. Through this isolate fraternity, man, rising in intelligence, extends the brotherhood of communities to the human race. From this, too, springs patriotism, which, without a country endeared by peculiar associations to love and defend, would not exist. If man was bound in mind and heart to no particular spot on earth; if the birth place, the hearths, the altars, and the graves of kindred were no bond, his first and last sentiment would be unmitigated selfishness, and instead of meeting and defying danger by his hearth and altar, he would fly to other spaces of earth He would be continually a wanderer—a nomad—careless where he pitched his tent, or where his grave was scooped.

And since this sentiment is so strong, so essential, and so beautiful, for the development and brotherhood of our race, how steadily intelligent races and nations should strive to render their native lands, their countries, worthy of their love and pride. The Roman of to-day is abject and bowed down, because his country is desecrated and shorn of the beauty and glory which inspired the conquering legions of the Cæsars. He may love his country as devotedly as did Fabius and Brutus, but it is not the love which springs from pride in her power, her virtue and her greatness: it is rather a love compounded of grief and pity, that she has so degenerated. The virtue and patriotism of a people depend much upon the condition of the country to which they belong. It may be easy to-day to impose fetters upon the inheritors of the Eternal City, but the world could not enslave a Roman of the age of Coriolanus. The love of country, simply, is not enough to inspire the noblest patriotism; it must, to stimulate the loftiest virtue and heroism, be love born of a just pride.

Thus writes the Editor of the *New Yorker*. We have seldom seen a better analysis of INHABITIVENESS, together with some of the influences of ADHESIVENESS, except from the pen of a professional Phrenologist. We have the satisfaction of knowing that Mr. Stuart has studied Phrenology, and is, therefore, qualified to treat subjects connected with mental manifestation correctly.

A HAPPY THOUGHT.—Some sweet warbler in the *London Times*, utters the following beautiful sentiment. Lay it to heart, friends. It contains gentle but heart reaching reproof—

"There is a voice within me,
And 'tis so sweet a voice,
That its soft lispings win me,
Till tears start to mine eyes;
Deep from my soul it springeth,
Like hidden melody;
And ever more it singeth
This song of songs to me:
'This world is full of beauty,
As other worlds above;
And if we did our duty,
It might be full of love?'"

DON'T FRET.

It is UNAMIABLE. A fretting man or woman is one of the most unlovely objects in the world. A wasp is a comfortable housemate in comparison—it only stings when disturbed. But an habitual fretter buzzes, if he don't sting, and without provocation. "It is better to dwell in the corner of the housetop, than with a brawling woman and in a wide house."

It is USELESS. It sets no broken bones, stops no leaks, gathers no spilt milk, cements no smashed pitchers, cures no spoiled hay, and changes no east winds. It inflicts nobody but the fretter himself. Children or servants cease to respect the authority or obey the commands of a complaining, worrisome, exacting parent or master. They know that "barking dogs don't bite," and fretters don't strike. So, they go on their own way, when one calm word of rebuke or command, from one habitually amiable and quiet, settles the question. We were once at a panoramic exhibition, when more than a hundred rude boys made such incessant noise as to disturb

the whole company. A gentleman present made frequent attempts to hush them, in vain. Another gentleman uttered the monosyllable, "BOYS!" in a tone of expostulation and authority—the work was done. We have seen a maxim worthy to be inserted in letters of gold on every dwelling:—"Never fret about things you can help, and never about things you can't help." That covers the whole ground. It is worth remembering.

Miscellaneous Department.

IS THE WORLD IMPROVING?

According to the reports of the Prison Discipline Society, the number of state prisoners in Maine decreased, (allowing for the increase of population,) from 1837 to 1844, 49 per cent; in Massachusetts, 16 per cent; in New Jersey, 30 per cent; in Maryland, Pennsylvania, and Virginia, between 30 and 40 per cent; in New York, 22 per cent; and in New Hampshire and Connecticut the ratio remained about the same. A very large proportion of the convictions for crime, is from the foreign population, and making allowances for the increase from this source, it is estimated that the average decrease of crime in the States mentioned, between 1837 and 1847, was nearly or quite 50 per cent. And yet there are many who are making themselves unhappy over the mistaken idea that the world is becoming every day more and more a Sodom, which is ripening rapidly for the just vengeance of Heaven. No one can dispute the fact that there is crime and sin enough among men to awaken the abhorrence of Heaven and of the pure of the earth, but that the world is becoming worse, we do not believe a word of it. Statistics and figures will not lie—they are above the authority of all the fears or impressions of partial observers.

It is contrary to the immutable law of progress which is stamped upon all that God has made. Vice produces unhappiness—indeed, it is a direct war upon happiness, and man is too fond of exemption from the penalties of natural law, to wilfully incur its penalties with his eyes open. He ignorantly doubts the certainty or probability of punishment, or he would not sin. But light is being scattered—men are coming to know that bad air, improper diet, exciting stimulants, tight lacing, and too little sleep, are injurious to the body; and such a reformation as has occurred in the civilized world within the last twenty years on these subjects has never before been witnessed in the same length of time.

Earth and its inhabitants do not go backward, but are constantly rising in the scale of perfection. Nature abhors retrogression. Mules may be procured, but nature evinces her reprobation of the vile amalgamation by preventing them from reproducing. The white and black races may mix blood, but nature denies fecundity to the third generation of the mulatto, who rarely reach the age of twenty years.

Art, mechanism, and science are opening to the world the means of physical and mental improvement. Education is more general than ever before—the press and the pulpit are illuminating the world, and it were indeed a sorry fact if, under all these facilities for becoming better and happier by having abundant means for such improvement, if man was really becoming daily more wicked and blinded to his highest good.

True, we *hear* of more crime than we did thirty years ago, because newspapers have increased a thousand fold, and the more rapid modes of communication bring states and nations into a more intimate acquaintance; besides, the telegraph heralds a murder or a fire from St. Louis to Boston before the blood of the victim or the ashes of the edifice are cold, and all along the lines a thousand daily presses record the facts, and ten thousand locomotives, steamboats, and stages scatter the paper wings of thought to millions of greedy readers. Is it strange that a few antiquated conservatives should shudder under such a concentrated record of crime, and because they thus hear of more than they did when it took a week to go from Boston to New York, and when not one family in twenty took even a weekly newspaper?

Teach man the laws of Physiology, and he will not carry coals in his bosom—pour liquid fire into his stomach—make a smoke-house of himself—or lace the breath of life out of his lungs. Then the sin and misery of these practices will cease, except among the foolhardy and insane. Teach him the laws of his mental nature, and you awaken a dread of perverted animal feeling, and inspire his moral and intellectual powers with desires after light, truth, and purity.

In proportion as general education is extended, we lessen the incentives to vice, by giving the means to all to become honorable and useful men; besides, the public sentiment is thus rendered more sensitive to every development of crime, and therefore these plague spots appear more glaring on the vestments of society, from the simple fact that a clearer light and broader contrast reveals them.

A boiling kettle always sends the impurities to the surface, but because the scum is thus revealed, it does not prove that there is more impurity than when it slumbered at the bottom, or pervaded every drop of the liquid; even so, if education, general intelligence, and moral elevation, make the seething cauldron of society display what of vice there is, in strong light, it does not by any means prove that man is becoming more depraved. Thank God! man is becoming better, as he is every day becoming wiser and happier.

PHRENOLOGY IN EASTON, PA.

In compliance with an invitation from Easton, Pa., Mr. L. N. Fowler gave a course of lectures at that place in November, 1850, the influence of which may be inferred from the following letter received soon after his return.

EASTON, PA., *Dec. 7th*, 1850.

MR. L. N. FOWLER:—Dear Sir—The undersigned, citizens of Easton, who attended your course of lectures in this place, on "Phrenology," and its kindred sciences, would offer this evidence of their feelings towards you, and their approbation of the subjects to which you have given your attention. We believe the course of lectures which you delivered in Easton, were fraught with valuable information to all classes and condition of men, and will have a beneficial influence upon our citizens. While we would express ourselves as firm believers in the science of Phrenology, and give this evidence of our regard for you as an eminently successful lecturer upon that subject, we may be permitted to add that we have been very favorably impressed with your bearing as a man, and will be happy to have you again visit our town.

Peter Brady.	Henry Snyder.	R. S. Kidsey.
Martin Frey.	Abraham Gosner.	Chs. P. Emmons.
B. B. Thomas.	John V. Hutman.	Joseph S. Yoder.
Peter Bellis.	Daniel Thomas.	William Thomas.
Abraham Sigman.	W. H. Hutter.	J. Sigman.
J. H. Cook.	Henry S. Seip.	Erasmus D. Fish.
James F. Cann.	Joseph Savitz.	Oliver D. Wilcox.
Thomas M. Cann.	George Straub.	J. R. Lovell.
J. C. Hagenbuck.	Alexander Miller.	Jacob Hay.
M. H. Horn, Jr.	J. Murphy.	E. Rockwell.
W. M. Stephens.	C. Weygandf.	Samuel Wilhelm.
Reubin Grop.	J. J. Horn.	Reuben Ruecht.
S. Shimer.	B. M. Youells.	W. H. Schooley.
William H. Pomp.	Lawrence Titus.	A. Ticknor.
C. E. Buck.	J. A. Nightengale.	E. K. Sawalb.
Mahlon Taylor.	Daniel Black.	T. R. Ketchum.
Amos Davis.	George Field.	Samuel L. Cooley.
H. W. Lourey.	John Siege.	George W. Hersler.
Thomas H. Becker.		

E. F. Probst, F. L. Crane, } Committee.

Events of the Month.

DOMESTIC.

The most important measure of Congress is the passage of the Cheap Postage Bill by the House of Representatives, it being still under discussion in the Senate. This Bill provides for the uniform rate of postage of three cents on all letters not weighing over half an ounce, and of one cent on each newspaper, pamphlet, periodical, magazine, and book, not weighing over two ounces, and one cent for each additional ounce, or fraction of an ounce. Bound books, not weighing over thirty ounces, are deemed mailable matter. The postage on magazines, when prepaid, to be reduced one-half. Several important changes are proposed in the Senate, and we trust we shall be able to record the passage of a satisfactory Postage Law, upon the issue of our next number.

The alleged discovery by Mr. Paine, of Worcester, of a method of converting water into hydrogen gas, continues to call forth a good deal of speculation. A similar discovery is reported to have been made in Paris, with a fair prospect of its being applied to practical uses. A party of gentlemen, consisting of Mr. Sanford, the Secretary of the American Legation, Mr. Sykes, of Philadelphia, and several other citizens of the United States, were present at an exhibition of the process, and were favorably impressed with its results. In order to prepare the gas, steam is passed into an air-tight iron retort: the bottom is covered with a layer of charcoal, an inch thick; and by heating the retort to a bright red, carbonic acid and hydrogen are evolved; the oxygen of the water combining with the charcoal forms carbonic acid, and leaves the hydrogen pure. Both gases are thus conducted into a chamber con-

taining lime; the carbonic acid combines with the lime, forming carbonate of lime; while the pure hydrogen is liberated and passes off for use.

Patents are said to have been obtained for this method in Europe and in the United States, with a a view to introduce the manufacture as speedily as possible. We shall doubtless have more light on the subject, whenever the invention is carried into successful operation.

The Collin's steamer Atlantic, Captain James West, left Liverpool, for New York, December 28, 1850, with twenty-nine passengers, among whom were several gentlemen from Boston and New York, including a son of Mr. Abbott Lawrence, the American Minister at London. Nothing had been heard from her at the time of our going to press, being her forty-sixth day out; although a strong hope is cherished by many persons of great experience in nautical affairs, that we may yet have tidings of her safety. It is supposed that having met with some disaster at sea, she has put into the Azores, or some other distant port, from which there has not yet been time to receive intelligence. In the opinion of others, she has probably fallen in with fields of ice, or encountered some other equally fatal danger of the sea. The anxiety of those who have friends on board has now become intense.

The 145th anniversary of the birth day of Benjamin Franklin was celebrated by the New York Typographical Society, with appropriate literary exercises, and a public banquet at Niblo's Garden. The occasion called together a large assemblage of persons connected with the typographical profession, publishers, authors, editors, including many distinguished literary men, and a great number of our most eminent citizens. Among the invited guests, who were seated in a conspicuous position on the stage fronting the audience, were William C. Bryant, and Fitz-Greene Halleck, side by side with Washington Irving, and other prominent celebrities. The famous English novelist, G. P. R. James, who arrived at the close of the exercises, was received with expressions of cordial hospitality. An introductory address was delivered by Mr. James White, giving a succint historical sketch of the Society under whose auspices they had met to commemorate the birth of the great Printer and Philosopher. He was followed by the Hon. Judge Edmonds, who delivered an eloquent oration, interspersed with many pleasing reminiscences. One of the most interesting speeches at the banquet, which succeeded the public literary performances, was made by Mr. James, who paid an earnest tribute to the eminent merits of the authors of America, expressing his admiration of Bryant, and Halleck, and Irving, and Bayard Taylor, whom he was delighted to meet on that occasion, and of Ticknor, Prescott, Holmes, and others, whose acquaintance he had made since his arrival in this country. Other speeches were made by Charles King, the accomplished Head of Columbia College, Benson J. Lossing, the admirable wood-engraver and author of the "Pictorial Field Book of the American Revolution," George P. Putnam, the enterprising publisher of Irving, Cooper, Miss Bremer, Miss Sedgwick, Dr. Mayo, and other leading American authors, Rev. Mr. Chapin, the highly distinguished pulpit orator, of the Universalist denomination, and Parke Godwin of the *Evening Post*, and author of the beautiful legendary story in honor of Jenny Lind, called "Vala." The banquet passed off to the great satisfaction of the numerous guests, and was wound up with a ball, which continued to a late hour.

The distinguished American ornithologist, John James Audubon, died at his residence, at Minniesland, on the Hudson River, on the 27th of January. He had suffered from impaired health for nearly two years, and his death was not unexpected to his numerous friends. His funeral was attended by a large concourse of people, and his remains were deposited in the cemetery of Trinity Church, which adjoins the Minniesland estate. He has left an unspotted and beautiful memory, being no less distinguished for the sweet amenity of his manners, and the sterling integrity of his character, than for his passionate devotion to the pursuit of natural science.

A young man named George Robinett, who has been exhibited as the Giant Boy, died suddenly at the North American Hotel, in this city; and according to the verdict of the Coroner's Jury, by the mal-practice of his attending physician, E. G. Latham. The deceased, who weighed over four hundred pounds, had been for some time tormented with an insatiable thirst, drinking six or seven gallons of water a day, without relief. On sending for Latham, he was induced to take some medicine, in a liquid form, a part of which proved to be lobelia, and soon after became delirious, and died in great agony. Latham has been committed to the Tombs, and now awaits his trial for manslaughter.

The committee of the Common Council of this city, on the Law Department, have made a stringent report on the evils arising from the sale of lottery policies. More than five thousand dollars a day is expended in this kind of gambling. They recommend a rigid enforcement of the law, which forbids all kinds of raffling or distribution of money or goods by lot or chance; and makes it the duty of presiding judges to charge every grand jury to inquire into all violations of the laws against lotteries.

Donald McKenzie, who was formerly a partner with the late John Jacob Astor in establishing the fur trade west of the Rocky Mountains, died on the 20th of January, at Mayville, Chatauque County, New York. He was born in Scotland June 15th, 1783. At the age of seventeen he came to Canada, and joined the North-West Company, in whose service he remained eight years. In 1809 he made the overland route to the mouth of the Columbia River—a feat full of perils, and rarely attempted at that time. He remained at Astoria until it was surrendered by McDougall to the British.

A course of lectures has been delivered in this city by C. Chauncey Burr and Heman Burr, on the subject of Imagination, Ghost-seeing, and the Spiritual Knockings. A great number of experiments were introduced in connection with the lectures, showing the influence of the will of the operator over the imagination of impressible persons. These experiments were of a surprising, as well as amusing character, and produced a great effect upon the audience. Mr. C. C. Burr supposes that the Spiritual Knockings are caused by artificial means, and at all times indicate deception and fraud on the part of the mediums. He professes to be able to produce similar sounds with his toe-joints, but his exhibitions of this power did not give universal satisfaction. The most skeptical minds, who have examined this subject, regard the Spiritual Knockings as mysterious as before.

An occurrence of mysterious and tragic interest has recently taken place in Quincy, Mass., of which the following particulars only have come to light. Early in November last two persons appeared in the village of Quincy, the oldest calling himself John Green, and the youngest George Sand, the well-known pseudonym of Madame Dudevant, the celebrated French novel writer. Green stated that he was a shoemaker, and wanted to find work at his trade. He had come from Ohio with his half-brother, who wished to finish his education. He obtained work at boot-making, at which he remained eight days, when, one morning, he complained of being unwell, and did not go to the shop. He spent a short time in reading, and then invited his companion to go to walk, who complied with evident reluctance, telling a female in the family that it was only to oblige John. They stopped at a store in the village, where Green purchased some gunpowder and percussion caps. After they left the store, they were seen passing along with hands joined, and swinging. No one saw them afterwards, nor was their absence accounted for, until the 7th of February, when their bodies were discovered in a piece of woods between Quincy and Braintree by two young men on a hunting excursion. The bodies were covered with ice and snow, and frozen stiff. By the side of the elder, or grasped in his right hand, was a discharged pistol. A powder flask, a quantity of percussion caps, and some shot in a paper, lay on the ground. It seemed, from appearances, that the younger died of a wound from a pistol ball, which entered the head just over the left ear. The body was distorted, showing that the person had died in agony. The death wound appeared to have been inflicted by the hands of the other, who had afterwards reloaded the pistol and discharged it into his own mouth. He apparently fell back, and from the position of his body died without a struggle. A little money and a few other articles, were found upon the bodies, but nothing which revealed their names or the manner of their mysterious death. The younger was discovered to be a female, although dressed in man's clothes. It is stated that they had experienced a great interest in the "Spiritual knockings," and made it the chief topic of their discourse. They had with them several copies of the "Spirit Messenger," also, two copies of the "Univercœlum," and the "Great Harmonia," and a copy of "Indiana,"

one of Madame Dudevant's most exceptionable novels. Their bodies have been placed in a tomb at Quincy, to await the arrival of their friends, should any be found.

The Society of French Communists at Nauvoo, under the direction of M. Cabut, have recently established a weekly newspaper in English called the *Popular Tribune*. The condition of the society is said to be highly encouraging. It numbers three hundred and forty persons, of whom one hundred and fifty are men, and eighty-six women. Two years since it commenced industrial operations with a capital of less than twenty thousand dollars. Since that time it has erected a steam-mill for corn and wheat; a saw-mill for its own use, and a distillery for commercial purposes—a branch of business which it would set a good example by closing up forever. Among the trades now in successful operation are those of tailors, shoemakers, smiths, engineers, tinmen, clock and watch-makers, wheel-wrights, carpenters and joiners, coopers, tanners, bricklayers, and others. The society have a store in the city of St. Louis, where the surplus products of its industry are sold. It has its own bakery, slaughter-house, gardens and kitchens. The latter employ two head cooks, three assistants, and six women. The average daily cost of food for three hundred persons based on the expenditure of the last year is less than twenty three dollars, although the bill of fare shows a genuine French taste for good living. In their political bearings the members of this society sympathise with the advocates of National Reform and Free Soil, adhering to Republicanism as much as the best Republicans among the citizens of the United States. As regards religion, they profess to be true Christians, like the Christians of ancient times, whose law was the Gospel. The society has made excellent arrangements for education, two or three schools being already established. As soon as their plans can be perfected, pupils will be received from families in the vicinity.

A new manufactory has been established at Galveston for the preparation of "Meat Biscuit." This is a newly discovered article of food, said to be of great value on account of its nutritious qualities, and for the length of time it may be preserved. The factory contains an engine of ten horse power, which drives the machinery, consisting of biscuit machines to knead, roll, and cut the dough, a grist mill to pulverise the biscuit, and the guillotine for mincing the meat, to facilitate the boiling. The appearance of the biscuit is that of a light colored sugar cake. It is packed in air-tight casks or tin canisters, and retains its properties for a long time without change. The war department has ordered a large amount for the troops on the frontiers.

Francis Bowen, professor elect of history in Harvard College, has been rejected by the Board of Overseers. The first instance on record in which the Board has failed to confirm a nomination for any instructor by the corporation of the college. It is said that Mr. Bowen's rejection may be attributed as much to the indiscreet manner in which he has urged his own suit as to his defence of the Austrian policy in the Hungarian controversy.——The Maryland Reform Convention has adopted a clause allowing only those who believe in God, and in rewards and punishments in this world, or the next, to act as jurors, witnesses, and judges——Henry Long, the fugitive slave, has been again advertised for sale in Georgia by his Richmond purchaser——Frederika Bremer has arrived at Havana——The Legislature of Rhode Island have passed to its third reading a bill for the exemption of homesteads from attachment and sale for debt to the value of $800.——It has been discovered that the usual anesthetic agents, such as ether and chloroform, will remove pain by local application to the part affected.——The Hon. Horace Everett, who for fourteen successive years represented his district in Congress, died at his residence in Windsor, Vermont, on the 30th of January, at the age of seventy-two years. In addition to his political career, he was distinguished for his ardent and successful devotion to horticulture.——Charles Dickens has published a new edition of his "American Notes," in the preface to which he states with gratuitous insolence, that he still cherishes his mean opinion of life in the United States, and that having borne the ill will of their citizens for eight years, he can do so eight more, or still longer if necessary.

The Legislature of Massachusetts have appropriated $3,000 for the expenses of an agent to the Grand Industrial Exhibition at London. He is to be appointed by the Governor, and Council.——The great work of the late John C. Calhoun on the Constitution of the United States, is to be published in this city. The sum of $10,000 has been appropriated by the Legislature of South Carolina towards publishing and distributing the work throughout the State.——The Bath House near the Horse Shoe Fall, at Ningara, on the Canada side, has been destroyed by fire. It cost $12,000, and for some years past has been closed.——It has been decided by the Pension Office, that in case of a soldier engaged to serve six months, and actually serving four, and hiring a substitute for the remainder of the time, each is entitled to bounty land accruing to the actual amount of service rendered.——Richard G. Turner, who has been in prison in Baltimore four years for defrauding the Mechanic's Bank of $50,000, has received a pardon from Governor Lowd, after serving out about half his sentence.——The celebrated Indian Chief Wild Cat, who has formed a settlement in Mexico, has been appointed a Justice of the Peace by the Mexican government. He has taken with him a number of negroes and Indians from Arkansas, who are to be provided with implements of husbandry, and a certain portion of land, on condition of their cultivating it, and obeying the laws of the country.

FOREIGN.

The celebrated Oriental traveler Lagard is now at Bagdad, where he is preparing to pursue his interesting researches. He has procured some valuable sculpture for the University of Oxford, which, it seems, have met with great difficulty in reaching their place of destination. They were on a raft, which was wrecked between Bagdad and Busrah, and a month elapsing before their recovery. They were too late for the vessel in which Mr. Lagard had proposed to forward them to England. They are now at Busrah, with other antiquarian specimens, and will probably reach England in the course of the ensuing spring. Mr. Lagard has left Nineveh for Babylon, but has not yet commenced excavations, not having received the necessary documents from the Turkish authorities, and the country around Bagdad being in a state of great confusion. No one can leave the gates without danger of having his throat cut, or at least robbed of even the clothes on his back.

The celebrated Polish General Bem died at Aleppo about the 1st of December. He remained in the Mahometan faith to the last, and was buried with military honors. Next to Napoleon and Wellington, he may be considered the greatest military commander of modern times. He was born in Gallicia in 1795, being fifty-five years old at the time of his death. He had often expressed the conviction that he should die in 1850.——A patent has been taken out in Paris for a new printing machine, which is said to rival the great improvements introduced by our countryman, Mr. Hoe. It strikes off 25,000 impressions in an hour, and reduces the cost of press work about one-half.——A split has taken place in the Society of Jesuits, on the question of maintaining the system of tactics which has been so long in operation. It was decided to stick to the old order.

It is stated that the city of Paris is filled with Italian emigrants, seeking to mend their fortunes from the disasters of the Revolution. Many of them are men of high rank. They are all reduced to the necessity of performing the most menial offices, in order to procure a livelihood. It was their hope that a war would be declared between Austria and Prussia, intending to return to Italy, as soon as that event should take place.——The number of physicians that have died in Paris since January 1st, 1849, is 65. At present, there are in Paris 1,351 physicians and surgeons. In 1849, there were 1,389; of whom 86 have since left Paris. Twelve of these have emigrated to California. Besides the physicians and surgeons now in Paris, there are 178 health officers, 381 apothecaries, and 350 midwives.——Sir David Brewster, the distinguished Scotch philosopher, has devoted some attention to the newly discovered science of Electro-Biology, and has expressed his persuasion of the truth of its principles. After describing some extraordinary experiments made by an operator named Darley, he says:—"They were all convinced, as I was, that the nomena which we witnessed were real phenomena, and as well established as any other facts in physical science. The process by which the operator produced them—the mode by which that process acts upon the mind of the patient—and the reference of the phenomena to some general law in the constitution of man—may long remain unknown; but it is not difficult to see, in the recent discoveries

of M. Dubois Raymond and Matteucia, and in the laws which regulate the relative intensity of the external and internal impression on the nerves of sensation, some not very indistinct indications of that remarkable process by which minds of peculiar sensibility are temporarily placed under the dominion of physical influences directed and developed by some living agent."

An address was lately delivered by the popular English lecturer, George Dawson, who is described as a compound of Carlyle, Emerson, Theodore Parker, and himself, in which he said that "this world was never yet saved but by what have been regarded foolish, extravagant, Utopian, and eccentric doctrines. Conformity is good in its place, respectable, and decent looking; it folds its robes tastefully, and decently lies down to die. But it is these novel ideas, and self-willed, devoted, and eccentric men that save."

Varieties.

The Printing Press.—The proprietors of the New York Daily Sun—Messrs. Beach Brothers—recently gave a public dinner to the inventor and builder of one of the greatest machines of the age—namely, a press that will print 20,000 copies per hour! There were several hundred editors, publishers, inventors, and others who were invited to participate in this sumptuous banquet, and the

"Feast of Reason and flow of Soul."

Speeches were made, in which the present age was contrasted with the past—showing how rapidly we are progressing in the arts of peace and knowledge. Col. Hoe has won for himself—his country—a nation's gratitude, and a fame which will never die.

In our next number we shall give a description of the "last fast" printing-press, together with a history of the rise, progress, and future, of the art of printing.

PHRENOLOGY IN RHODE ISLAND.

Whereas, the public mind in Georgiaville has been called to the subject of Phrenology for a few evenings past, by a course of lectures from Dr. C. R. Broadbent; and whereas, some expression of sentiment on our part in reference to the science and the lectures is called for—therefore,

Resolved, That we regard the science of Phrenology as the true science of mind—as the only key by which we can unlock the mysteries of man's intellectual, social, and moral nature—and as the only light by which that nature can be developed in harmony with the mind of Deity and the welfare of the race.

Resolved, That we hail with joy the increasing facilities by which this science is spreading itself in the community, and hope the time is not far distant when parents, teachers, clergymen, jurors, and legislators will discharge the duties of their several stations in accordance with those benevolent principles which a knowledge of this science suggests.

Resolved, That the lectures of Dr. Broadbent, in this place, have given general satisfaction, and in our opinion are calculated to do good.

Georgiaville, 1850.

WOMAN'S TONGUE AND PEN.

Not only can woman grace the social circle with her admirable colloquial capabilities, but she is giving proof of her power to wield the pen most effectually. We doubt if there is an editor in the country who does not welcome Mrs. Swisshelm's "Visitor" weekly to his table, and if he has sense enough to enjoy piquant criticism, sprightly fancy and frank, sterling home thrusts at error, rejoice that woman sometimes has courage to "wander out of her sphere," and show that she has talent.

But the "Visitor" does not come alone—"The Lily," as modest in name as it is meritorious in matter, is another evidence that the sphere of woman has been made more narrow than her power to do good. Mrs. Bloomer's paper, "the Lily," is published at Seneca Falls, New York, at fifty cents a year, and if it is allowed to die for want of liberal patronage, we shall pity the bad taste and worse sense of the reading public. It really is refreshing to get Mrs. Bloomer on one side of us and Mrs. Swisshelm on the other—editorially, we mean, of course—and have a nice chat with these heroines of the quill. If their faces and hearts are portrayed by the fair features and warm sentiments of these eloquent companions of ours, we do not blame Messrs. B. and S. for securing a life lease of both. Now don't get jealous, friends, this affection *may* not be mutual.

A New Railroad has recently been projected, extending north from Auburn to Little Sodus Bay on Lake Ontario, and south, intersecting the Erie Railroad at Owego. It is expected that this new road will be laid during the present year. A better section of country than this whole range from Owego to Lake Ontario cannot be found in the State. Timber is plenty, the soil rich, and capable of producing crops of every variety which can be grown in this climate. The success of the Road is beyond all question. It is presumed that it would soon become a thoroughfare from New York to Canada, bringing the coal mines of Pennsylvania within a few hours of all the ports on Lake Ontario.

General Notices.

Goods for the People.—Our readers will notice, in another column, the Dry goods advertisement of Messrs. Hitchcock & Leadbeater, whom we know both personally and professionally, and can assure our friends that when they want anything in their line, they will be pretty sure to get suited there, and will find fair and candid men to deal with.

Our Books in Illinois.—W. O. Espy, M. D., writes as follows:—

"I am of opinion, that if you had efficient agents at Mt. Vernon, Salem, Nashville, Marion, and other country towns, in the southern part of this State, there might be a great many of them sold."

Of the truth of this, there is no doubt, but who will engage in the work? It would prove both "pleasant and profitable," to those who may undertake it. Our books are not kept by booksellers generally, and hundreds might be sold where they have never yet been introduced. Young men, and co-workers, will you not look into this matter? The field is large, the harvest ripe, and all things ready for the reapers, a great crop may be gathered for the reforms we advocate.

Our Circulation.—Although our circulation, in its previous pamphlet form, probably exceeded that of any other scientific magazine, we hope, in its present shape, with all our contemplated improvements, to *double* our subscription list. Should all of our old subscribers co-operate with us, it will be an easy matter to give the *Journal* a circulation of *one hundred thousand copies*.

POSTSCRIPT—The Atlantic Safe!

After working off our first form, the joyful news of the safe arrival, at Cork, Ireland, of our favorite Steamer Atlantic was brought to New York, by the British Steamer Africa, which arrived Feb. 15th. The Atlantic sailed from Liverpool Dec. 28th, and on her ninth day out, being within 900 miles of Halifax, she broke her shaft, and finding it impossible with her sails to make headway westward, against the strong head winds, she was put about, and arrived, Jan. 22d, in the port of Cork. This is a noble triumph for steamships. The Africa brought the Atlantic's mails and passengers.

To Correspondents.

A. H. Your article is too long, and has too little thought in it. Our readers want pith, point, and energy in the style. We like the moral tone of the article, but it would cost us more time and labor to trim out the useless words, and remoddle the sentences, than to write a new one.

M. B. You should write the names of subscribers, and especially the name of the town, county, and State *plainly*, so that they may be easily read, and that with certainty, and then we will answer for any mistake that may occur. You are so much accustomed to see the name of your place written that it looks plain to you, although it is the least plain of any word in the entire letter. Moreover, proper names have no connection with the sense of the sentence, and must be plainly written if you would be sure to have it read correctly. If persons would remember that we have hundreds of letters to read every week, and that names occur in them we never heard of before, they would save us the trouble of spelling out "turkey-track" penmanship, by taking at least ordinary pains to write plainly.

Please put your business in first at the head of the letter and not mix it with other pages, and spin your yarn afterwards, and we shall not be obliged to consume the time of business clerks on what more properly belongs to the consideration of the editors.

F G. T. We don't remember the facts, in regard to which you say our liberality was abused, but the fault was not ours. The list of names sent last year were not refused by us. We thank you for your effort this year, and the Journal will be sent.

S. W. We shall comply with your wishes if possible.

Deferred Articles.—In consequence of the great length of the article on the "Magnetic Telegraph," a number of interesting articles are unavoidably left out.

New Publications.

The World's Progress; a Dictionary of Dates. G. P. Putnam. New York.

This new and valuable work is designed to facilitate the study of history, in giving dates of events, the birth and death of eminent men, and the progress of the world in arts, arms, literature, and science. Every library, public and private, should have it, and when the world shall learn its value, it will be as common as Webster's Dictionary, in every lawyer's office, editorial sanctum, and clergyman's study. The editor has done the world a service which will be appreciated.

Lectures on Hygiene and Hydropathy. By R. S. Houghton, M. D.

An earnest desire to benefit his fellow men by a clear statement of the principles of his subject, appears to have been the object of this excellent effort of the talented author. Fowlers & Wells, publishers.

Accidents and Emergencies. By Alfred Smee, F. R. S.

This little work, costing but 12½ cents, should be in the hands of every family. Its object is to teach families how to manage themselves in such emergencies as, cuts, burns injury of the eyes, choking, bite of mad dogs, poisons, drowning, and many other accidents. Many persons die before medical aid can be procured, who might be saved by such knowledge as a child could glean from this excellent little work. Published by Fowlers & Wells.

The Water-Cure Journal, for January, appears in a new dress, enlarged, and every way improved. Its immense circulation has induced the publishers to tender these improvements to their readers for 1851. Terms, $1.00 a year.

English Grammar. The English Language in its Elements and Forms. With a History of its Origin and Development. Designed for use in Colleges and Schools. By William C. Fowler, late Professor of Rhetoric in Amherst College. 8vo., pp. 675. New York: Harper & Brothers.

This profoundly elaborate and philosophical work, must at once take its place as a standard book in our colleges and higher seminaries, for it is, without question, far superior to any similar publication, in its range of topics, research, and arrangement to facilitate a knowledge of our language. Amusing illustrations, and pleasant associations are so happily interwoven as to greatly aid the memory to fix the principles, and to make the critital study of the language a welcome task. It is brought out in a style highly creditable to the enterprising publishers.

The Propagandist. Stephen Pearl Andrews, editor. John F. Trow, publisher.

We should have noticed before this beautiful little newspaper, devoted to the printing and spelling reform, edited by the oldest Phonographer in the United States, who is too well known to those interested in that art to require any recommendation from us. The Propagandist is printed, in part, in ordinary type, partly in Phonotypy, and partly in Phonography. This last feature renders it especially attractive to all who are interested in learning Phonography. The Phonography in the paper is beautifully executed, by a new art, expressly adapted to the purpose, and which is precisely the desideratum which Phonographers have so long desired. The Propagandist is a quarto of eight pages, issued every other Wednesday, at one dollar per annum. Subscriptions are received at this office.

The Chorus Glee Book; consisting of Glees, Quartets, Trios, Duets, and Solos. By J. B. Woodbury, assisted by Thomas Hastings. New York: Huntington & Savage. Price $6 per dozen.

Shakespear speaks rather disparagingly of "the man that hath no music in his soul," and whether his conclusions are correct or not, "the man that is not moved by concord of sweet sounds" certainly looses one of the best of life's pleasures. We know of no more pleasant way to spend an hour than to join a few friends in a social song, and of no book containing a better collection to be used on such an occasion than the Chorus Glee Book. Its music is of a high order and the words of an elevating character. Persons whishing anything of the kind, and who that can sing does not, cannot do better than obtain it.

Labor: its History and Prospects. By Robert Dale Owen. New York: Fowlers & Wells.

We have room in the present number only to announce this work by the Hon. Mr. Owen. We shall refer to it again. It is published in a beautiful 12mo. volume, and is sold at twenty-five cents.

ADVERTISEMENTS.

NEW SPRING DRY GOODS.

HITCHCOCK AND LEADBEATER, No. 347 Broadway, corner of Leonard-street,

☞ ARE ALREADY IN RECEIPT OF THEIR NEW AND BEAUTIFUL SPRING GOODS,

and are prepared to serve their customers therewith, as well as with every kind, style, and quality of

FALL AND WINTER GOODS,

of which they have one of the largest and best assortments in New York, which embraces every kind of

FANCY AND STAPLE DRY GOODS,

worn by ladies or gentlemen, or used by families.

It is impossible for them to enumerate even a moiety of their articles, and would, therefore, barely name a few

GRENADINES, ORGANDIES, SILK TISSUES, SILKS, PRINTED JACONETS AND CAMBRICS, BAREGES, CANTON CRAPE AND THIBET SHAWLS, MANTILLAS, SWISS MUSLINS, &c.

They would also beg leave to say that they give their attention entirely to the retail business, are in constant communication with their customers, and therefore

LEARN THEIR WANTS AND WILL SUPPLY THEM,

if any pains, and the markets of this or any other country will enable them to do so; and to make their assortment so general as to enable any lady to

SIT DOWN AND SELECT EVERY ARTICLE

she wants, without the fatigue and perplexity of shopping, while their invariable rule of

ONE PRICE, WITHOUT VARIATION,

secures to every customer, whether a child or an adult,

FAIR AND HONEST DEALING.

In addition to their extensive assortment of

EVERY KIND OF DRESS GOODS,

they have constantly on hand every kind of

HOUSEWIFE AND FAMILY GOODS,

as Linen Sheetings and Shirtings, Damasks, Diapers, Napkins, and indeed every kind of Linen Goods, which they purchased before the recent advance in prices, and sell

FULL TWENTY PER CENT BELOW THE USUAL RATES.

LACE AND MUSLIN WINDOW DRAPERIES, WOOLEN BLANKETS AND QUILTS, TOILET, TABLE, AND PIANO COVERS, COTTON SHIRTINGS AND SHEETINGS, MOURNING AND HALF-MOURNING GOODS,

and a full and perfect assortment of Gentlemen's

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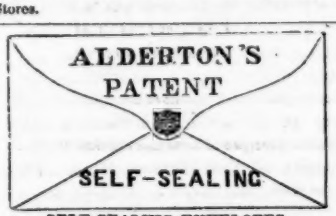

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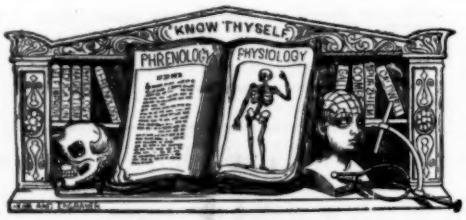

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